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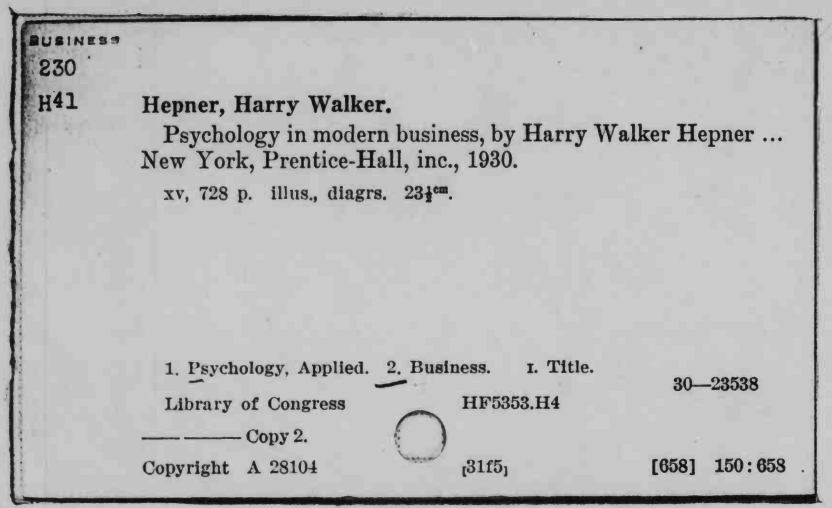

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Hepner, Harry Walker.

Psychology in modern business, by Harry Walker Hepner ... New York, Prentice-Hall, inc., 1930.

xv, 728 p. illus., diagrs. 23½cm.

1. Psychology, Applied. 2. Business. I. Title.

Library of Congress HF5353.H4 30—23538

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PSYCHOLOGY
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SCHOOL OF BUSINESS

Psychology
In Modern Business

by

Harry Walker Hepner

Assistant Professor of Psychology and Head of Business Psychology, College of Business Administration, Syracuse University; Formerly in charge of personnel research for the Goodyear Tire & Rubber Co., Akron, Ohio, The Philadelphia Company & Affiliated Corporations, and Kaufmann's Department Store, Pittsburgh, Pa.

New York
PRENTICE-HALL, INC.
1930

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PRINTED IN THE UNITED STATES OF AMERICA

TO

MARK A. MAY

AND

D. W. K. PEACOCK

Preface

THE business man often finds his most perplexing problems to be psychological in nature. His work is primarily that of predicting and influencing the behavior of the individual and the group. Indeed, the problems of materials, machines, and systems are apt to be of secondary importance. He has frequently realized this fact and has recognized his need of a knowledge of modern psychological facts and methods. However, when he has attempted to read the journals and books of the science as it is taught in our colleges, he has been disappointed. The subject matter of textbooks on elementary psychology is too abstruse and far removed from the human problems of the shop, the office, the market, and his own mental activities. The gap between the university classroom and his own situations has been so wide that he could seldom see any relation between the two fields. Accordingly, I have attempted to approach the problems of business psychology from the point of view of the business man. I have purposely avoided quoting the abstruse scientific journals, and have concentrated my studies upon the penetrating writings of modern business. Only when necessary, have I consulted the scientific books and journals. This method has been pursued in the hope that my selection of problems and language might combine, for the business man, the proper amount of theory with the situations which arise in everyday life.

This attempt to make usable the discoveries and views of the psychologists has been stimulated by my own experience in teaching students in a college of business. When I first taught the subject, I taught it with the aim of most

university teachers of psychology—namely, to prepare the student to study more psychology in college. The emphasis of my elementary courses was upon the preparation of the students for advanced courses of study. The advanced courses were taught on the basis of preparing the student to do even more advanced work in the best institutions. Consequently, the needs of the science were paramount and the needs of the student were incidental or neglected entirely. After I had followed this traditional method of teaching for several years, I was startled when I noted that less than one per cent of my students or those of my fellow-instructors took up the study of psychology for its own sake. Nearly all the students entered business or some other occupation where psychology, as such, was fortuitously applied.

Since this awakening, my aim in teaching has been to give the student of business those psychological facts and theories that meet his needs as an executive, a worker, and a citizen. To help prepare him to take his place in society as a leader has been my most ardent hope. My method of attack has not been the traditional approach. Indeed, I could be convicted of academic heresy in the second chapter, where I go so far as to attempt to develop an attitude. However, it is hoped that this treatment of the place of psychology in modern business will be of direct and vital value to the executive and to the student of commerce. My purpose will have been attained if the reader gains a better realization of the opportunities and sound methods of analyzing and influencing his employees, customers, associates, and himself.

Naturally, I am indebted to many for their assistance in writing this book. I have read hundreds of trade journals and I wish to express my gratitude particularly to *Printers' Ink, Sales Management, Advertising & Selling, The New York Review of Business,* and the Policyholders' Service Bureau of the Metropolitan Life Insurance Company.

Other publishers and writers to whom I am indebted are mentioned in the usual form where the quotations occur.

Friends and colleagues who have given helpful suggestions are Professors Hubert E. Bice, Howard T. Viets, William F. Borgward, Carl R. Bye, William M. Hench, Otis C. Ingebritsen, Irving E. Bender, and Ernst Thelin. Similar acknowledgment is made to Dr. Albert Siewers, Miss Elizabeth Allen, Miss Dorothy Gray, Mr. John C. Eickwort, Mrs. Marion Schanck, and Mrs. Hazel B. Burger. My students have given much valuable assistance in collecting and assembling data. One of these, Miss Alice Davey, deserves special mention for the hundreds of statistical tabulations which she has made. I cannot adequately express the extent to which I have been benefited by the criticisms and assistance of these friends.

H. W. H.

Contents

INTRODUCTION

CHAPTER — PAGE

I—THE PSYCHOLOGICAL PROBLEMS OF THE BUSINESS MAN 3

The mousetrap fallacy; What psychology is not; What psychology is; Psychological problems of the business man; Psychological problems of the individual; Outline of plan of treatment of these problems.

PART ONE—THE NATURE OF THE MENTAL LIFE

II—WHAT IS THE MOST HELPFUL ATTITUDE FOR THE BUSINESS MAN? 23

The biologist's theory of organic evolution; Examples of evolution in American living and thinking; Evolution in business and business methods; Causes of the new American tempo; Adjustment to change is the basic attitude for the business man.

III—BEHAVIOR PATTERNS—THE PERSONALITY TRAITS AND "MIND" OF THE BUSINESS MAN . . . 48

A behavior pattern of the executives in business; A general personality trait of men in business, introversion or extroversion; Neural patterns and the nervous system; Neurograms; The brain cortex; Association linkages; Why should the business man understand neural patterns? The integrative action of the nervous system.

IV—PECULIAR PEOPLE WHOM WE MEET IN BUSINESS —CLASSIFICATION OF, AND PHYSICAL CAUSES FOR, PECULIARITIES OF PEOPLE 76

The thyroid gland; The parathyroids; The thymus; The pineal body; The pituitary bodies; The adrenals; The gonads; Psychopathological conditions classified; Neurasthenia; Psychasthenia; Hysteria.

V—HOW PEOPLE EVADE THEIR PROBLEMS—THEIR PSYCHOPATHIC ADJUSTMENTS 98

Compensatory mechanisms; The hero mechanisms; Fixed ideas; Negativism; Regression; The Œdipus and "secre-

CHAPTER PAGE

tarial" complex; Projection; Introjection; Phobias; Invalidism; Remedies for invalidism; Habit spasms; Sexual anomalies.

VI—Methods of Treating the Psychopaths . . 130
What is psychoanalysis? Criticisms and values of psychoanalysis; Reëducation.

Part Two—Predicting the Behavior of the Individual

VII—The Pseudo-Scientific Methods of Analyzing People 151
Phrenology; Character analysis from observation of physical features; Why people have accepted character analysis; Graphology and other pseudo-scientific methods of analysis.

VIII—Extending Credit 170
An experiment in "psychic waves"; The use of instruments in credit work; The attitude of the credit man; Coöperate with the sales force; The credit department, as well as the sales department, must advertise its services; The credit man should predict his losses for classes of customers; The credit man must keep in close touch with the condition of each account; Cashing checks for strangers.

IX—Hiring the Employee—The Interview . . . 193
The unreliability of the usual interview; Kinds of interviews; Empirical rules in the selection of salesmen; The statistical interview; Psychological tests in hiring; Several examples of the economic value of tests; Limitations of tests; The psychoanalytical interview; Letters of Application; Letters of recommendation; Summary.

X—Promoting the Employee 229
Rating the employee; Kinds of rating scales; General principles for using and making ratings; Job analyses for employment and promotion purposes; The guide for classifying the jobs or master job-classification chart; The development program of each interested employee.

XI—Choosing a Vocation—Predicting the Individual's Own Behavior 264
The problem of vocational misfits; Basic principles in choosing a vocation; The vocational advice of parents and friends; Methods of choosing a vocation; Self-analysis; Psychological tests for vocational guidance; The case method of vocational guidance; Occupational analyses; The vocational program; Specialization in the vocational program; College education as a part of a vocational program.

Part Three—Influencing the Behavior of the Individual

XII—Personal Efficiency—How the Business Man Can Regulate His Own Behavior To Obtain Advancement 309
The urge for activity; The "will"; Improving the memory; Memorizing names and faces of people; Frequency of Use and Error; Utilizing time efficiently; Getting rid of mesmeric salesmen; Obtaining promotion in the large business concern; Difficulties.

XIII—The Executive and the Individual Employee 336
The humanness of executives; Executive policies in dealing with the individual employee; Employees who must be discharged; The individual executive's contribution to morale.

XIV—Psychology Applied To Salesmanship . . . 358
The salesman's conquest of fear; Formulas for selling; Directing the sales talk toward the prospect's problem; The approach; The demonstration and sales talk; The sales talk; Answering objections; The art of getting the order on the order book; Types of prospects; The psychology of selling summarized; Failure to get the order.

Part Four—Predicting the Behavior of the Group

XV—Several Predictions for the Marketing Executive 405
Predicting the market for the product; Predicting the effectiveness of advertising copy; Predicting coupon advertising returns by months; Predicting the returns from a series of follow-up letters; Predicting fashions; Men's fashions; Designs in fashion products are changed gradually; Can we predict the social and business changes of the future? Dangers of predicting group behavior.

XVI—Business Cycles 440
The cycles of business; Possible threats of normal business growth; Predicting for the particular business; Advertising in relation to the business cycle; Leveling down the seasonal fluctuations in sales.

Part Five—Influencing the Behavior of the Group

XVII—The Executive and Public Good Will . . . 463
Measuring consumer good will; Methods of increasing customer good will; Competition and good will; Con-

CHAPTER PAGE

sumer contests; Special sales "days" and national "weeks"; The effect of commercial finance companies; Rumors and prejudices; The public relations counselor.

XVIII—The Appeal of the Advertisement . 498
The appeal or the keynote of the advertisement; The variety of reaction tendencies or appeals that can be used by executives; The appeal versus the form of the advertisement; One appeal versus several; Reason why versus emotional appeals; Human interest in the copy; Human interest carried to the extreme; The positive versus the negative appeal; Plausibility in copy; General rules for the appeal; Sources of ideas for advertising and selling appeals; Exaggerating the appeal; What are the causes of super-advertising?

XIX—Advertising's Devices In Influencing Returns 538
How words influence us; Business words which are changing; The word FREE in advertising; General rules for coupons in advertising; Slogans; Trade names; Confusion of trade names; Trade characters; Direct mail devices to induce action; Color in direct mail; Fifteen attention-getting devices in magazine advertising.

XX—Supervising Groups of Employees—Informal Methods 577
The psychology of the employee; Labor's propaganda; Legitimate methods of telling the employer's side to labor; The passing of the strike. What next?

XXI—Supervising Groups of Employees—Formal Methods 597
Welfare work; Mental factors in accident prevention; Employee representation plans; Sharing profits with employees; Employee stock purchase plans; Suggestion systems.

XXII—Supervising Women Employees 623
How the executive acquires his attitude regarding women; Emotional differences resulting from physiological differences; Psychological differences; The psychological problems of married women compared with those of single women; Sex differences of interest to the executive.

Part Six—Psychological Research In Business

XXIII—Basic Principles of Business Research . . . 645
Introduction; Professional business research organizations; When starting important business researches; Points to look for when analyzing a research report; The mailed questionnaire; The personal interview as a source of research data.

CHAPTER PAGE

XXIV—Psychological Research "Tools" 673
The order-of-merit method; The order-of-merit scale; The measurement of relationship between two series rather than differences within one series; The probability table; Measures of central tendency; When differences between averages indicate real differences; Correcting for guessing.

Appendix 699

Index 719

PSYCHOLOGY IN MODERN BUSINESS

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The Man Who Made the Best Mousetrap Waits for the World to Make a Beaten Path to His Door.

PSYCHOLOGY IN MODERN BUSINESS

CHAPTER I

The Psychological Problems of the Business Man

The mousetrap fallacy.—The maxim of the "mousetrap," attributed to Emerson, served as a guide to many of our business fathers. They believed that, if a man made a good product, the world would make a beaten path to his door. In previous generations, men could build a successful business upon such a traditional principle. Indeed, some are still making a limited success by producing a good product and trying hard to sell it. Certainly, the soundness of the product is basic and we would not belittle the success of those pioneers who depended upon quality, industry, and character to achieve success. To-day, these factors are taken for granted. Experience and rules of thumb are still essential; but the *empirical method* of business management has, to some extent, been augmented or displaced by more reliable methods of attracting customers and building business. Possible users of the "mousetrap" must be ferreted out, told the qualities of the product, and stimulated to buy and use it. "Mahomet must go to the mountain."

The exact techniques and researches of the engineer and the chemist have made magnificent contributions to society and have served the business man nobly. Their importance is firmly established. However, in the fields of human relations, such as selling, advertising, hiring employees, motivating salesmen, predicting markets, and building good will, the contributions of the psychologist are still to be accepted and applied. As these newer methods of

dealing with the human factors in business are being developed, the modern business manager is learning how to apply them. In fact, in the near future he will be unable to avoid their study and use, because his more aggressive competitors compel him to go beyond tradition and experience. He is gradually seeking aid from the scientists who use the techniques of the physicist and the chemist in analyzing and influencing human behavior. The *scientific method* is based upon controlled experiments and carefully analyzed investigations. It is organized and systematized. Personal feelings are rigidly cast out. The conclusions must withstand specialized mathematical searchings. The procedure must be described in order that others may repeat the study and retest for errors. Of course, the method is slow and requires much expense and exceptional intelligence. Only a small percentage of college graduates are considered of sufficiently high intelligence and training to use the method correctly.

The university psychologists have been trained in the scientific approach to the study of human behavior. They may even become so researchful that they admire only the rigorous and time-consuming scientific methods and are unable to grasp the point of view of those who have the advantages of years rich in experience. On the other hand, many a business man will "turn up his nose" at the mention of psychology, "because," he says, "the psychologists may have the theories but I have the facts and know how to apply them." One wit expressed this in his definition, "A psychologist is a man who tells you what you already know in a language that you cannot understand." It is evident that most business men have made their major decisions on the basis of practical experience or by "rule of thumb" rather than by carefully conducted experimentation. In the field of human relationships, whether dealing with the individual or the mass, the precepts handed down by business fathers and grandfathers have determined most of the treatment given by active executives.

Gradually, the business empiricist and the scientist have become more friendly in their approach to human problems. The business man often finds that the academician can give him valuable suggestions and formulate some of the results of his experiences. The scientist, too, has learned that some laboratory tested theories do not always stand up under actual conditions. At times he can improve his technique by working with the business man.

In this book we shall deal with the psychological problems of the business man by both methods. We shall attempt to present some of the principles which have evolved out of the experiences of the men who "have been through the mill" and of those who are skilled in the exact methods of science. Both approaches are necessary to a complete and satisfactory answer to problems of behavior. In some of our discussions the problems will be brought into the psychologist's study. In other cases, the psychologist will sit by the business man at his desk or go with him into the shop.

The business man should bear in mind that the scientist is more keenly interested in *knowing* than in *doing*. Many business men and high school graduates come to college and expect the college to teach them how to perform the activities required in vocational life. The scientists usually teach the abstract principles and assume that the acquiring of skills must be achieved outside the classrooms. To know how to do must not be confused with the ability to do.

What psychology is not.—If fifty business men were asked to define psychology, a wide range of answers would be received. Some think that psychology is still defined by the older dictionary definition which used the root words *psyche*, soul, and *logy*, a suffix meaning a science—the science of the soul. Originally, psychology was a branch of philosophy, and the early definition of psychology was then applicable. A generation ago psychology severed its relations with philosophy and became a science in itself. It no longer studies the soul, nor is it interested in prob-

lems such as communication with the dead. Psychology and psychical research are two entirely different fields, and the psychologist does not have very much hope of successful discoveries in psychic realms. Psychology has lost its mystery. It is not interested in cults or in magical influences on people who happen to be about us. It does not take the place of the witch doctor; it has developed objective methods and a body of facts of its own.

Psychology is not interested in character analysis from observation of superficial physical signs, except to show that such methods of analyzing people are fallacious. Many sales managers mistakenly think that they are psychologists, when they try to predict a man's selling ability from the color of his hair or the shape of his chin. In a succeeding chapter we shall devote more space to this question and shall analyze the established theories in regard to the relationship between physical and mental traits.

Psychologists are not interested in mind reading or in thought transference. They have not found that mental telepathy has sound foundations. Investigations of those incidents in the lives of their friends which indicated that mental telepathy might exist usually showed that such experiences were coincidences which occur in the life of everyone. When the psychologists have checked or examined phenomena of this sort, they have found that the apparently mystical can be explained in simple everyday terms. Nor is psychology a short cut to success in business or in life. Many people who study psychology do it with the hope of finding an open sesame to success. It will not make a mentally strong and powerful individual out of a weakling. It is of assistance, of course, in bringing out the latent traits of people, and in enabling them to adjust themselves to each other; but we should look upon psychology as a science that is helpful and practical rather than magical.

What psychology is.—Psychology, as previously mentioned, has passed through several stages. Its origin was

in philosophy; but, from the study of the soul, it passed to the study of the mind. Psychologists continued to study the mind until they became confused among themselves as to what was meant by the term "mind," and now we use "mind" in a limited sense only. When it was found that mind could not be defined or located, psychology was defined as "a study of consciousness." After studying consciousness for several years, we found that that also had definite limitations. The history of the science indicates that we have given up the study of the soul, of the mind, and of consciousness, and now define it as the "science or study of human behavior." Behavior, as used here, refers to more than conduct, deportment, or manner. It includes all integrated activities of the whole organism, even birth and death.

The problems of psychology and their treatment can be approached from several different angles; consequently, various schools are now active. The school of psychologists which is most scientific in its methods and outlook is the behavioristic school. The behaviorists pay attention only to those forms of human behavior which are overt, or which can be observed or measured in some definite manner. They disregard all subjective estimates or introspections. Behaviorists are not interested in what people think of themselves or say of themselves, because it has been found that most people do not wholly understand or know their mental lives. On the other hand, introspectionists probably have a definite place in the study of the mental life, because our experiences indicate that some things can be explained in no other way. To illustrate these two methods let us analyze a common experience or situation, such as a musical concert.

When the behaviorist goes to the musical concert and studies it psychologically, he does not ask those who attend what their feelings are. He observes and measures their interest by the amount of applause, the number of people who attend, the changes of expression on their faces, and

other outward signs. The behaviorist's report of the musical concert would be in terms of his observations rather than of his feelings.

The introspectionist who studies the same musical concert records his feelings and describes his emotions with regard to the delight that the music gave him. He might tell us that he was "lifted beyond himself" while he listened to the strains of the symphony. His listeners might catch the *spirit* of the music from his enthusiastic manner. Indeed, for anyone really to understand the feelings of those who enjoy music, he must be there and enjoy the situation himself, because it cannot be described or expressed in articulate terms. The introspective method is essential to a complete description of our mental lives.

The behavioristic method, therefore, is inadequate under certain circumstances; but it is the most scientific, and, therefore, the most reliable, method of studying the mental life. Scientifically, it is better to lean toward behaviorism than toward introspectionism, because the findings of the behaviorist can be measured objectively and verified.

If we define psychology as the study of human behavior, how shall we define business psychology? The answer may be found in the procedures of some of the older exact sciences. The astronomer spends years of research in discovering laws which enable him to predict the movements of the heavenly bodies. He has no control over them, and, therefore, directs his efforts toward predictions. The botanist makes predictions and also controls, to some extent, his plants. He knows that, when he makes certain combinations of varieties, he will get some predictable results. Similarly, each science may be studied as to the phenomena that it predicts or controls.

Psychology is distinctive when compared with other sciences. Its predictions are not so exact as those of the astronomer; nor can it control results so mechanically as can the botanist. It can, however, make some predictions, and it can influence, even though it cannot wholly control,

human behavior. *Business psychology is the study of predicting and influencing human behavior in business.* It is directed toward all the problems of business where human behavior can be predicted or influenced. This is an exact way of stating what business men often mean when they say, "I am trying to analyze and understand people, in order that I may know what they will do and get them to do what I want them to do." All problems treated in this book are discussed as aspects of prediction and control of behavior. If the reader will keep in mind these two themes as he reads, he will recognize how the problems of the business man are treated from these two angles.

Psychological problems of the business man.—The business man spends a major portion of his time in analyzing and influencing the behavior of other persons; but he also has himself as a constant subject of analysis and control. His own psychological problems may be as difficult to analyze and to solve as those of other persons. In order that we might know what some of the psychological problems of business men are, an attempt was made to discover the most prominent questions that interest or baffle them. Approximately five hundred business men were interviewed, and asked to list the problems of a psychological nature which were most acute with them. As a result of this survey a list of 97 problems was tabulated. Later on, this list was submitted to several hundred business men and the replies of 167 men were selected at random and tabulated for the percentages of business men who had each problem in the list. These 167 business men who listed their problems stated that their past or present business experiences involved functions enumerated in the following table:

TABLE I

Business Functions	*Per Cent Performing Those Functions*
Executive (major and minor)	66.6
Salesmanship	39.6
Supervisory	37.8

TABLE I *(Continued)*

Business Functions	*Per Cent Performing Those Functions*
Department head	30.6
Retailing	22.2
Accounting	17.5
Sales management	15.0
Production	12.0
Business counseling	9.6
Buying	1.2

The men who reported their experience were not limited to any one function or phase of business. Thus, a man was permitted to report himself as an executive, a department head, and in the field of production.

Table II gives the number of years that they had been working in the business world since they left school or college.

TABLE II

Number of Years	*Number of Men*	*Total Per Cent*
16—and above	99	59.4
11—15	30	18.0
6—10	20	12.0
1— 5	9	5.3
Not stated	9	5.3
	167	100

The psychological problems and the per cent of business men who reported each problem were as follows:

TABLE III

Psychological Problems of Business Men	*Per Cent Having the Problem*
1. Remembering names and faces of people	75.0
2. How to make employees enthusiastic and energetic	72.6
3. How to obtain the maximum amount of work from employees	68.4
4. Ability to forget business and enjoy yourself after working hours	66.6
5. How to get employees to coöperate with others	62.4
6. How and when to praise an employee	60.0
7. Selecting suitable men for promotion	58.8
8. When hiring, what questions should be asked	58.8
9. How to turn down a salesman in such a way that he will respect your decision and call again, or not, as you wish	58.2
10. Satisfying disgruntled customers so as to keep their trade	58.2
11. How and when to reprimand an employee	58.2

TABLE III *(Continued)*

Psychological Problems of Business Men	*Per Cent Having the Problem*
12. Praising the men or explaining their faults to obtain better work	56.4
13. How one should act toward competitors	55.8
14. Refusing an employee a raise in pay and at the same time keeping him working, unprejudiced and ambitious	55.2
15. How to get the most out of your time while at work	55.2
16. Extension of credit to customers	54.6
17. Advance of pay to employees	54.0
18. How to be stern and commanding and yet keep employees' good will	54.0
19. How to make a good impression when entering a business office	54.0
20. How to make men satisfied with their work	53.4
21. How intimate should executives become with employees	53.4
22. How kindly to refuse a man a job	53.4
23. Assigning jobs according to ability and character of the man	52.2
24. How to deal with cliques and petty jealousies among employees	52.2
25. How to deal with the employee who constantly complains	52.2
26. How to make a good impression when leaving a business office	51.0
27. How to increase sales during slack seasons	50.4
28. How to handle applicants for positions	50.4
29. The extent to which employees should be taken into confidence	50.4
30. How to check up on employees	50.4
31. How to deal with tardiness	49.8
32. How to deal with the employee who "knows it all"	48.6
33. How the executive can induce his employees to look ahead	48.0
34. How to create harmony between employer and employees	48.0
35. How far employees should be trusted	47.4
36. How to get rid of salesmen who "hang on"	47.4
37. How to introduce new methods and systems to employees	44.4
38. How to eliminate useless movements of workers	44.4
39. How to make employees feel at ease with you	44.4
40. How to deal with absences	44.4
41. How to deal with the employee who thinks he is indispensable	44.4
42. How to make a job attractive to an employee	43.8
43. Selecting congenial business companions	43.2
44. When to reward an employee for extra service	42.0
45. How to treat the employee who lies	42.0
46. How to reward efforts of employees to improve the business	41.4
47. How to get better acquainted with employees	40.2
48. Intoxication	40.2
49. How to deal with solicitors for churches, charities, etc.	39.6
50. How to create selling points for a product	39.6
51. Methods of displaying goods	39.0
52. How to convince people that merchandise of higher quality is necessarily higher in price	39.0
53. Whether employees should be taught all about the business	39.0
54. Coöperation between sales, credit, and collection departments	37.8
55. How to extend financial aid to employees	37.8
56. How to deal with the customer who seeks a low bid	37.8

TABLE III *(Continued)*

Psychological Problems of Business Men	*Per Cent Having the Problem*
57. How to put the personal element into dealings with customers and clients	37.2
58. Vacations—good work before and after	37.2
59. How to curb dissension when one or two employees start dissatisfying talk	36.0
60. How a contract may be obtained when competition is keen	36.0
61. How to approach one's superior and how to secure a favor	35.4
62. How to be able to have faith in the business during a depression	35.4
63. How to convince the worker that his wages are based on his productivity	35.4
64. How to have employees remember who their supervisor is	34.8
65. Cashing checks for persons not well known	34.2
66. How to ask for a raise or a promotion	34.2
67. Doing little things for your customers that will appeal to their emotions	31.8
68. Developing a philosophy of business	31.2
69. Putting a product on the market at the proper time to meet seasonal trade	30.6
70. How to keep relatives from expecting too much	30.6
71. When to name the price of an article	30.0
72. How to deal with men who are always telling on the other fellow to put themselves in right	30.0
73. Acquiring a knowledge of trade journals	30.0
74. Acquiring a knowledge of office appliances	29.4
75. Sharing profits with the employees	29.4
76. "Selling" salesmen on a new line	28.8
77. How to be popular in the social world as well as in business	28.8
78. Substituting another product for the product asked for	28.2
79. How to create an interest in workers who are worth keeping, but who are not interested in learning anything further in a school or a course	28.2
80. How to offer educational advantages to employees	27.6
81. Working men alone or in groups	26.4
82. How to secure accuracy from quick, nervous people who are apt to hurry an answer without actual verification	25.8
83. How to give employees opportunities for recreation	25.2
84. Selecting merchandise, not to please yourself, but to appeal to different types of customers	25.2
85. How to reduce fatigue	24.0
86. The amount of absenteeism to grant and whether women should be allowed more absences than men	24.0
87. Charting the organization	24.0
88. Selection of a name for a new product	21.6
89. How to make the most of busy seasons, as Christmas	21.0
90. How to stimulate friendly rivalry among employees	20.6
91. Maintenance of a suggestion box in the office	20.4
92. Settling disputes among executives	19.8
93. Annual picnic	19.2

TABLE III *(Continued)*

Psychological Problems of Business Men	*Per Cent Having the Problem*
94. Conducting contests among different departments	19.2
95. Conflicts with the union men	19.2
96. How to make a good impression on the manager	16.8
97. The employee who continually pads his overtime card	13.2

In addition to the above list of business problems, these business men answered, "Underscore any of the following subjects which you think should be taught to all college students," as follows:

TABLE IV

Subject	*Per Cent*
English grammar	73.8
Public speaking	72.6
Business ethics	68.4
Finance (personal)	67.8
Choosing a vocation	61.8
Personal efficiency	61.2
Personality development	58.2
Etiquette	56.4
Mental hygiene	41.4
Graphs and charting	34.8
The marriage relation	31.2
International affairs	24.0
Eugenics	18.6
Dietetics	18.0
Esthetic appreciation	17.5
Child training	15.0
Organic evolution	7.8
Interior decorating	7.8

Psychological problems of the individual.—In addition to the problems of the business man, a study was made of the psychological problems of 1,000 people—500 men and 500 women. In this case, the introspections of the people were used, and an attempt was made to find out by questionnaire what they considered to be their greatest fears or worries, their most difficult tendencies, the things that they lacked and needed most, the forms of their greatest inabilities, and their worst habits. The questionnaires were unsigned and were mailed to the writer by the answerer.

The people studied were not the extreme cases that are in the hospitals for the insane, nor were they unbalanced types found in the psychiatric clinics. That the majority had more education than most of the general population is evident from the following tabulation:

TABLE V

Men:	
College students, unmarried	275
College graduates, unmarried, employed	50
No college training, unmarried, employed	50
No college training, married, holding responsible positions	50
No college training, married, holding jobs of little responsibility	75
	500
Women:	
College students, unmarried	167
College graduates, married	36
Teachers, unmarried	50
Housewives, high school education or less	131
Office workers, high school education or less, unmarried	116
	500

Of course, these introspections are somewhat unreliable. If a psychiatrist were to study each one of the persons, he would probably report problems of a nature somewhat different from these which the individuals themselves reported. However, we shall treat the question of self-analysis in more detail later. For the present, we shall merely examine the tabulations to find out *what normal people consider to be their psychological problems.* The problems in which the sexes differed widely are marked with an asterisk.

THE PSYCHOLOGICAL PROBLEMS OF 1,000 NORMAL PEOPLE
(500 Men and 500 Women)

TABLE VI

	Percentages		
My greatest fears or worries are:	*Men*	*Women*	*Men and Women*
Criticisms by others	28	31	30
Dental treatments	24	22	23
*Electrical storms	10	27	18
*Getting fat	8	27	17

TABLE VI *(Continued)*

	Percentages		
My greatest fears or worries are:	*Men*	*Women*	*Men and Women*
Fire	14	19	17
Taking examinations	19	15	17
Serious illness	16	12	14
Drowning	13	15	14
*Being alone at night	3	22	13
Being poverty stricken	11	12	12
A nervous breakdown	9	10	9
Old age	7	11	9
Death	9	7	8
Being injured in traffic	6	9	8
*Committing a sexual crime	10	4	7
*The dark	5	9	7
*Burglars	4	9	7
Insanity	6	7	7
*Saying indecent words	2	8	5
*Going to hell forever	7	3	5
Losing my job	6	3	5
Using the telephone	3	3	3
Stealing something	2	2	2
Ghosts	1	1	1

TABLE VII

	Percentages		
My most difficult tendencies are:	*Men*	*Women*	*Men and Women*
Being too self-conscious	29	35	32
Worrying about what others think of me	31	32	31
*Being too sensitive	22	32	27
*Having depressed moods	22	30	26
*Taking life too seriously	17	25	21
*Irritableness	12	27	20
Feeling myself inferior to others	19	19	19
Being too stubborn	15	18	17
More interest in pleasure than in work	19	13	16
*Living beyond my means	24	9	15
Being interested in too many things	17	14	15
Talking too much	14	14	14
Being too modest about my own ability	15	11	13
Considering myself below average in ability	14	10	12
Evading the unpleasant rather than facing it with courage	11	13	12
Giving up my rights for the sake of others	12	11	12
Being lazy	14	9	11
Constantly finding fault with others	10	13	11
*Teasing others	14	8	11

TABLE VII *(Continued)*

My most difficult tendencies are:	Percentages		
	Men	*Women*	*Men and Women*
Blushing too much	10	8	9
Too curious about affairs of others	7	8	8
Being overemotional	7	9	8
*Being overfamiliar	8	3	6
Being quarrelsome	3	3	3

TABLE VIII

I *lack and need* most:	Percentages		
	Men	*Women*	*Men and Women*
Confidence in my own ability	29	37	33
Concentration	28	25	26
Initiative	23	23	23
Sociability	22	21	22
*Aggressiveness	24	17	20
*Will power	24	16	20
Self-control	21	18	20
Originality of ideas	14	16	15
Enthusiasm	16	13	14
Energy to achieve more	11	15	13
Faith in others	12	13	12
Chance to get wealthy	13	11	12
Popularity	10	11	11
Ambition	11	7	9
*Neatness	10	6	8
Opportunity to succeed	8	8	8
Affection	6	8	7
Sympathy for others	7	7	7
General education	8	7	7
Interest in opposite sex	7	6	7
Love for my own children	1	.4	1

TABLE IX

My greatest *inabilities* are to:	Percentages		
	Men	*Women*	*Men and Women*
Speak in public	38	36	37
Save money	31	27	29
Spend money wisely	28	20	24
*Conduct an interesting conversation	30	19	24
Use time advantageously	26	21	24
*Understand my own strong and weak traits	28	18	23
Control my own temper	23	20	21
Argue a point convincingly	22	20	21
Meet strangers well	16	23	20

TABLE IX *(Continued)*

My greatest *inabilities* are to:	Percentages		
	Men	*Women*	*Men and Women*
Complete the things I start	11	18	15
Converse with superiors	12	16	14
Find the right life mate	11	12	11
Remember important matters	11	11	11
*Sell myself and my ability to others	15	6	10
Be serious enough	12	9	10
*Get into the right vocation	13	7	10
Assume responsibility	11	10	10
*Control the sex instinct	15	3	9
Get along with relatives	6	7	7
Keep a secret	5	8	6
Get along with teachers	1	1	1

TABLE X

My worst *habits* are:	Percentages		
	Men	*Women*	*Men and Women*
Worrying about opinions of others	29	32	31
Daydreaming	22	25	23
Procrastination	22	23	22
Sarcasm	21	20	21
*Carelessness	22	12	17
Extravagance	19	17	18
*Worrying about my appearance	12	20	16
*Excessive profanity	22	2	12
*Being dictatorial	8	17	12
Tardiness	11	13	12
Pitying myself	10	13	12
Sleeping too much	10	9	10
Biting my finger nails	9	9	9
Brusqueness	8	7	8
Bad headaches	9	5	7
Stammering	4	1	2

Outline of plan of treatment of these problems.—Obviously, it would be impossible to treat exhaustively all the problems listed by the business men and the other individuals. Many of them are duplicates. Some may be considered as separate problems, but can be treated as members of the same group. Some cannot be answered, so far as we now know. However, we shall try to present some of the contributions that psychology can make to the understanding and treatment of these problems. We shall

try to discuss them in the vernacular of the business man, and, when technical terms are used, these will be illustrated by examples from business life, though sometimes they may be far-fetched. For ease of discussion and to prevent retracing, the following general outline will be used:

I. The nature of the mental life.
   1. The fundamental attitude of the business man.
   2. Behavior patterns.
   3. Abnormalities of the mental life.

II. *Predicting* the behavior of the INDIVIDUAL.
   1. Pseudo-scientific schemes.
   2. Extending credit.
   3. Interviewing applicants for jobs.
   4. Promoting the employee.
   5. Choosing a vocation.

III. *Influencing* the behavior of the INDIVIDUAL.
   1. The business man toward himself.
   2. The executive toward the individual employee.
   3. The salesman toward the prospect.

IV. *Predicting* the behavior of the GROUP.
   1. Marketing a product.
   2. Business cycles.

V. *Influencing* the behavior of the GROUP.
   1. The executive and the good will of the public.
   2. Advertising and the appeal.
   3. The devices of advertising.
   4. The executive and groups of employees.
   5. The executive and women employees.

VI. Psychological research in business.

VII. The Appendix.

While some of the immediate problems of the business man will be discussed, a definite and more vital aim will be to prepare the student of business to be more than a technician. The technician does well only that which some one has taught him to do, whereas the business leader develops the tasks for the technician and keeps him busy with

the everyday problems of business. The business leader looks upon his function as far more than the mere making and delivering of commodities. He does more than perform to-day's job well. He devises better methods for the tasks of to-morrow and visualizes the challenges of new jobs of the day after to-morrow. Our dominant objectives are those which are consistent with business leadership. This attempt to combine the empirical and the scientific treatment of business problems may be helpful to those leaders who are seeking more effective approaches in analyzing and influencing their employees, customers, friends, and themselves, both as individuals and as members of a group.

Projects.

1. Discuss some other methods of studying psychological problems of business men, such as job analyses, reports of rating agencies, government statistics, fluctuations in the number of persons employed in industry, psychiatric clinics, consulting the business counselors, trade journal articles, and teachers of business subjects.

2. Which psychological problems of the 1,000 normal persons were probably honestly answered and which were most "shaded"?

3. Do Tables VI to X have any value in the field of mental hygiene?

4. How does training for the business technician differ from training for business leadership?

5. How might the intensity of personal problems be measured? Of the 22 per cent of the women who said that they were afraid to be alone at night, is the fear of equal intensity in each?

Part I

THE NATURE OF THE MENTAL LIFE

Chapter II

What Is the Most Helpful Attitude for the Business Man?

In the preceding chapter we have seen that many of the problems of the business man involve human relations. If we are going to deal effectively with these problems, we should know the fundamental facts of human history and human nature. Man has been studied for centuries. We know a great deal about his history, his characteristics, and his nature; but certain phases of his mental life are unknown. In spite of the fact that scientists all over the world are studying man intensively, there is still much to learn. Psychologists are divided into several schools, because they cannot agree upon certain basic theories. However, enough facts and theories are now accepted among psychologists and other scientists for us to get a working view of man and his nature. When the psychologist studies man or human behavior, he has certain facts to begin with in his study. He studies what the other scientists already know about man before he studies those characteristics which we term "human behavior." Accordingly, we shall visit some of the other scientists before we spend all our time with the psychologists who study the business man's methods of dealing with human behavior. These scientists are:

1. The biologist.
2. The neurologist.
3. The endocrinologist.
4. The psychiatrist and the psychoanalyst.

In this and in several succeeding chapters we shall present

the accepted concepts of the scientists which are fundamental only to psychological analysis. In so far as biology is the study of human organisms, psychology is a branch of biology. The human animal and his behavior are wholly restricted by biological influences. In this chapter we shall note how man's business behavior is obedient to the same laws that govern all living things. Perhaps we can find the most helpful attitude for the business man among the biological theories.

The biologist's theory of organic evolution.[1]—When evolution is mentioned to the present-day newspaper reader, he suspects that it is a debatable theory and that it may be overthrown in another six months. This is not true. Evolution is here to stay. There is no more chance that it will be disproved or abandoned by the scientists than there is that some day we may believe the earth to be disk-shaped rather than spherical. The controversies among scientists which newspapers report bear upon minor parts of the theory, and these are too insignificant and too detailed for us to consider here. The general theory is an accepted part of our education and culture; and, contrary to some, the basic principle of organic evolution is helpful in explaining certain phases of religion, for even modern theology is based upon evolution. If we study Figure 1, we shall get a rough idea of the evolution of man from some lower and simpler form of organism. Millions of years were involved. The same laws and forces that we now see operating in changed living conditions, changed business conditions, and changed demands of society that business serves were operating through the long and tedious evolution of plants, animals, and man.

Many business men who have taken courses in geology, or who have read books dealing with organic evolution, do not realize that the same forces that ruled the world during

[1] The particular evolutionary concept presented here is Darwinian. Other theories of evolution, such as the instability of the cell, confirm the principles of change which interest the business man.

the evolution of man from the one-celled animal to his present highly organized state are the forces that control

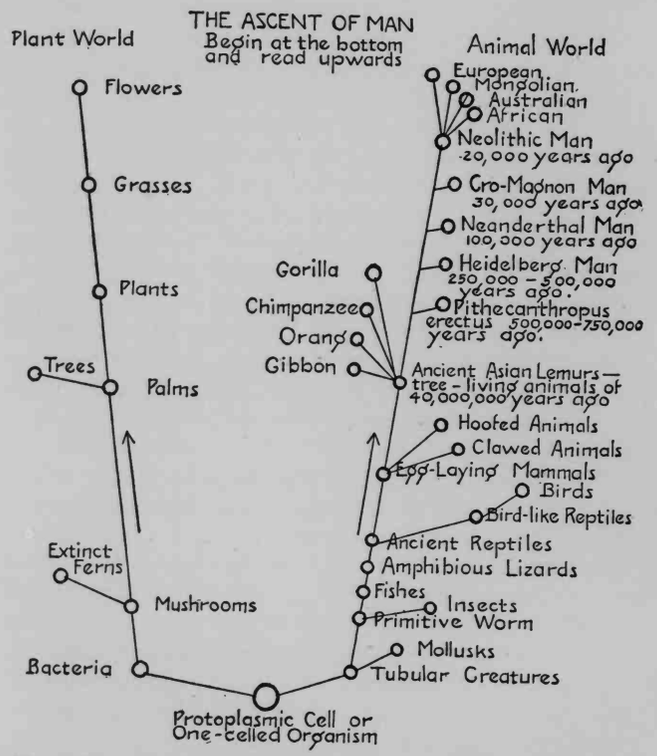


Fig. 1—Diagrammatic representation of the theory of organic evolution, showing the animal and plant world as having evolved from a protoplasmic cell. This diagram is not drawn according to scale. It attempts to show in rough general outline the accepted scientific theory of man's evolutionary ascent. (This chart was constructed after reading some of the writings of Edwin Grant Conklin, Arvid Reuterdahl, J. Arthur Thomson, E. E. Free, and William K. Gregory. However, none of these men is to be considered responsible for the above composite diagram.)

man to-day. The forces in the evolutionary process did not cease to operate several centuries ago. They are here with us now. So far as business is concerned, they appear

to be operating more rapidly and more forcefully now than ever before.

In the study of organic evolution, the biologist has collected a vast store of facts which he interprets in biological terms. We need not concern ourselves here with all those terms, but we should note a few. One of the most important principles is that of *variation.* This means that the offspring are never exactly like their parents. No two plants, animals, or human beings are ever precisely the same. In nature's patterns there is perpetual variation. Sometimes these variations may appear to be very small. According to Wallace, birds vary in strength and structure. "A variation of from 15 to 20 per cent may be ordinarily expected among specimens of the same species and sex, taken at the same locality." [2]

The biologist has also noted a second principle which helps the business man—*the struggle for existence.* The struggle for existence means that every living creature does its best, its very best, to live and to have young. Many species of animals lay thousands of eggs but have few offspring. The struggle is too great for most of the young to survive.

In the struggle for existence only the fittest survive. The others perish. A few have certain *adaptations* which enable them to survive. In considering these adaptations of nature, we must bear in mind that the animals and plants do not, consciously, adapt themselves to their environment. Adaptation in nature means that those species which happen to have, through the principle of variation, powers that fit into the environment, survive. Those whose muscles, legs, jaws, or wings are not strong enough to with-

[2] "A flock of one hundred thirty-six sparrows, driven by a hard wintry gale, exhausted and numbed with cold, were once taken into a laboratory of Brown University. In spite of the best care, sixty-four died. Accurate measurements were made of the living and the dead. The tabulations showed that the dead were slightly heavier, slightly larger, and had slightly shorter breast bones. This meant that the birds whose breast muscles were just slightly out of proportion to their weight and size could not endure the storm as the slightly lighter and stronger birds. In this study the difference between life and death was a difference of only one and one-third per cent in the proportions of the body."—Wallace, A. R., "Darwinism," The Macmillan Co., 1912.

stand the environment, perish. This struggle for existence does not mean that nature is cruel or harsh. Nature is simply a name for the way things are.

In comparison with the other creatures of the earth, man has one distinct advantage. He has intelligence. The biologists tell us that man has not changed in brain capacity for twenty thousand years. Man did not have to change structurally in order to meet the rigors of his environment. He used his "head." Survival did not depend entirely upon the chance strength of muscle or the length of arm, but also upon ability to cope with conditions by thinking. When man's environment does not fit, he changes it; if he does not, he perishes. When man found it cold and uncomfortable in the north, he did not migrate toward the equator, but developed artificial means of heating his abode. Man has the power of adaptation to a far greater extent than any other animal, and, if the change in conditions is not too great or too sudden, he can adapt himself to them. This is a most hopeful factor in the situation for the business man who finds himself in cross currents of rigorous conditions. If he recognizes the potent biological forces that govern the world and man's relation to his world, he can prepare to meet the changes in modern life and business, and survive in the business struggle for existence. Let us list a few of the changes now taking place in American life and business, and we may then see that the forces of evolution, so far as man is concerned, are operating with astounding significance for the present-day business man.

Examples of evolution in American living and thinking.—Every business man and student of business can probably call to mind one or more factory buildings which are now closed but which once represented active and successful businesses. Many of these dilapidated buildings might be considered as monuments to that time-worn phrase, "Times change." Some of these business concerns flourished for years; but, gradually, they became less active, then

their activities became spasmodic, and finally ceased entirely.

Every one knows that times change. The very business men whose buildings have gone to ruin repeated the same phrase, "Times change." Yet they failed to grasp the significance for themselves in time to adapt their activities to the new order which slowly crept over and around them and shut them off from the success of their competitors who anticipated and prepared for the changes. The business man who is in the forefront in his diagnosis of the public's tastes in one season may, in the course of one single year, be wholly out of step with the stride of that same public whom he served with a humming factory the year before.

Change in itself is nothing new to the business man, but the speed with which change now takes place is the disconcerting element in the business situation of this age. Speed has been put into the form of slogans. Typical sayings are: "Cut it short"; "Snap out of it"; "Make it snappy"; and "Be a live wire." If we examine some of our magazines, we find articles with titles such as "The New American Tempo," "Business Has Wings," "One Guess Ahead of Your Market," and "The Changing American Mind." Let us review some of these changes in living and business methods which have taken place within the life span of the fathers of to-day.

Periods of ten and twenty years often bring about complete obsolescence of the accepted and ultramodern. To the present-day business man the hoop skirt seems to belong to some prehistoric era. Even peg-top trousers, celluloid collars, and high shoes are remnants of the dark ages of 1910. Heavy winter underwear, the pipe and the cigar, tooth powders, stiff collars, and bulk goods are gradually receding from the shelves of the modern retailer. The effect of custom and changes of the times on business are well illustrated in the case of the shoe business. The per capita consumption of shoes for men in 1895 was three

pairs a year. By 1925 it had dropped down to 2.11. Why? Chiefly, the effect of the automobile and the fact that men now wear low shoes throughout the year. On the other hand, the per capita consumption for women has tended to increase. Why? Women wear shorter skirts, and the appearance of their shoes is more important; consequently, they buy more shoes. Surveys show, also, that the average size of women's shoes several years ago was 4. It is now 5½. The average size for men was 9½ and it is now 8.[3]

Hosiery also has changed. Few, indeed, are the women who wear cotton stockings. For a time, women wore part-cotton stockings. Then they wanted seamless hosiery, but now it must be full-fashioned and in harmony with the shoe styles or entirely absent. Think of all the changes that woman wrought by her fickleness in doing her hair! Manufacturers of hair nets, hairpins, ribbons, and combs have suffered; but the barbers and the "permanent" shops have gained immensely.

The shaving soap, which came to us for many years as a small round cake for the bottom of the shaving mug, has gone through the stages of the shaving stick, the powder, the cream, and now it has been superseded by the latherless cream, which does not require a brush and acts as a soothing lotion while the hair is being removed; and, when we wash our hands, should we be at the home of a friend, we will find a guest size cake of soap awaiting us. Time was when we ate our food and forgot about it. Now we count the number of calories, estimate the amount of roughage, take yeast to help digest it, and gargle our throats to be certain that we do not have halitosis. The organ, which has disappeared from the mail-order catalogue, was superseded by the piano. Now our per capita consumption of pianos is decreasing as the radio is increasing in popularity. Ownership of a costly car, and not a piano,

[3] "Yes, Indeed, the World Does Change!" *Printers' Ink Weekly*, April 7, 1927, p. 231.

as was the case years ago, is now a criterion of social standing.

Amusements, a generation ago, were simple and few. Children had little or no spending money. Sermons were long. Lectures and funerals were community diversions and subjects for a month's discussion. To-day, we have public parks, playgrounds, talking pictures, the automobile, the yacht, the airplane, the radio, community symphonies, and the orthophonic phonograph. Sport has been commercialized to the extent of $200,000,000 in annual admission fees.[4] Even letter writing has declined. The telephone has taken its place. If distance makes the telephone too expensive, we telegraph.

A few years ago vacations were spent at a resort hotel. The guests would come by train, remain the two or more weeks at the same place, and then take the train for home. Now the vacationer spends each night in a different town, and the housewives who cater to tourists and the gasoline stations get the benefits of vacation travel rather than railroads and hotels.

The number of our domestic servants is decreasing. In 1910 we had 2,531,222 domestic servants; by 1920 the number had decreased to 2,186,924. Compare this with the increase in the number of families: 1910, 20,255,555; 1920, 24,351,673. The number of women in certain clerical positions trebled in the course of the same ten years. Need we wonder, then, that an appreciable percentage of the nation's meals are consumed outside the home? The number of restaurants in New York City has increased from 7,500 in 1915 to 17,000 in 1925. In addition, a great increase has taken place in the number of drug stores, delicatessen stores, and candy stores that serve meals or sandwiches and coffee. The 1910 census lists 60,832 restaurant keepers for the entire country compared with 87,987 for 1920. Imagine how the manufacturers of cooking equipment and the distributors of foodstuffs must change their methods in order to articulate with the custom of "eating out"![5]

[4] "Sports," *The Industrial Digest*, May, 1927, p. 15.

Houses, too, have passed through the nondescript styles of the box nature, the gingerbread carvings, and the bungalow to the modern more varied and more beautiful styles. Just what American architecture will settle down to is difficult to foresee. Twenty years ago the garage was an exception. Now real estate men find it difficult to sell houses in certain sections unless the house has a two-car garage. Eventually, we may demand proximity to an airport before we will purchase a home. According to figures compiled by the United States Bureau of Labor Statistics, covering building permits in 257 cities, 53.7 per cent of homes provided in new buildings in 1928 were in apartment houses, 35.2 per cent in one-family dwellings, and 11.1 per cent in two-family dwellings. This is the first year since the Bureau has been compiling these data that more families were provided for in new apartment houses than in one-family and two-family houses combined. In 1921, only 24.4 per cent of families in the same cities were housed in apartment houses, 58.3 per cent in one-family dwellings, and 17.3 per cent in two-family dwellings.[6]

In our thinking and concepts of life we have changed also. Woman has been emancipated. She votes, smokes cigarettes, goes into business, drives a car, and attends college in increasing numbers. And sex may be discussed in any public gathering, provided we phrase our conversation in Freudian terms. Most remarkable of all is the fact that the intimate accessories of woman are advertised in our national magazines and no one objects, because the business man is sincere and phrases his statements with polite logic and an appeal to health and charm.

Our religious convictions are changing. Denominational

[5] "What Does the 'Eating Out' Habit Mean to the Food Advertiser?" *Advertising and Selling Magazine*, May 4, 1927, p. 19.

[6] *Domestic Commerce*, June 17, 1929, p. 7.

lines are being destroyed by mergers and community church services. We have gone so far as to scrap the weak surplus churches of a community and develop one or several really live institutions. Fifty adult members of a Sunday school class were asked how many had parents who did not allow their children to play cards or to dance. Forty per cent of the parents of these adults objected to cards and dancing, but only 10 per cent of the present adults object to such amusement.

The children are not suffering in this new era. We have accepted universal education as a function of the state and require it of each child. We do not hesitate to tax ourselves more and again more that youth may have bigger and better schools. Anyone who wishes it may have a college education. The whole attitude in child training seems to be changing from a standard of prompt obedience to one of comradeship, or of doubt as to the proper parental policy.

The Way of Parents

I trudged to school on my two cold feet and carried a dinner pail;
He glides to school in a limousine with two "spares" tied to its tail.
Yet I'm pretending to understand the thought of my little elf—
Like other folk in this changing world, I'm fond of fooling myself!

I worked all day in blistering fields, nor got a cent of pay;
He dodges the "cops" from morn to night, in search of a place to play.
And yet I "father" him right along, and swagger, "Yes, I know,"—
This world of his is another world from the one where I had to grow.

I fed the beasts at morn and night; did many another chore.
To dress and breakfast and find his books is his limit—sometimes more.
While I fondly pray that he, some day, may rise much higher than I,
I have robbed the boy of everything that I was aided by![7]

—Strickland Gillilan in the *Journal of Education*.

All these and other changes have changed business methods, and business itself has changed greatly and is continuing to change at an accelerated rate.

[7] Seashore, Carl E.: "Learning and Living in College," *University of Iowa Studies*, March 1, 1927.

Evolution in business and business methods.—Perhaps the fundamental changes in business can be illustrated from certain estimates of changes in employment of the workers and businesses of the United States. Some of the estimated changes in employment during the period from 1920 to 1928 are shown in the following table: [8]

	Decrease	*Increase*
Agricultural employment	1,200,000	
Factory employment	800,000	
Railroad employment	300,000	
Estimated total decrease	2,300,000	
Building trades		300,000
Selling and servicing automobiles		750,000
Hotel workers		500,000
Public school teachers (1920–1926)		135,000
Telephone employees (1920–1927)		78,000
Life insurance agents		100,000
Barbering, beauty parlors, etc.		200,000
Secondary school and college students (1920–1926)		2,100,000
Population of the United States		13,600,000

No one knows whether we have had a net increase or a net decrease in unemployment, but we do know that occupational shifts of evolutionary—almost revolutionary—size and rapidity have taken place. The total effect is difficult to measure, because of increases in labor productivity and decreases in working hours.

According to data compiled by the National Industrial Conference Board: Of the total population of the United States 41.5 per cent was gainfully employed in 1910, 39.4 per cent in 1920, and only 37.2 per cent in 1925. Thus, in fifteen years, there has been a decrease of 4.3 per cent in the percentage of the population gainfully employed, and there has been an almost proportionate gain in the percentage of the population enrolled in schools and colleges. A large gain in the standard of living has thus come, not only through shorter hours and fewer people working, but through more and better education.[9]

[8] Adapted from Slichter, Sumner H.: "Recent Employment Movements," *Survey Graphic*, April, 1929.

[9] "Why We Are Living Better," *Literary Digest*, July 23, 1927, p. 54. Taken from *Business Conditions Weekly* of the Alexander Hamilton Institute.

Ten years ago it took one hour and forty-two minutes to produce a pair of shoes; to-day only fifty-four minutes are required. Twelve years ago 1260 man-hours were required to construct an average automobile; to-day only 220 man-hours are used in the same process. A similar change has taken place in agricultural production. The average

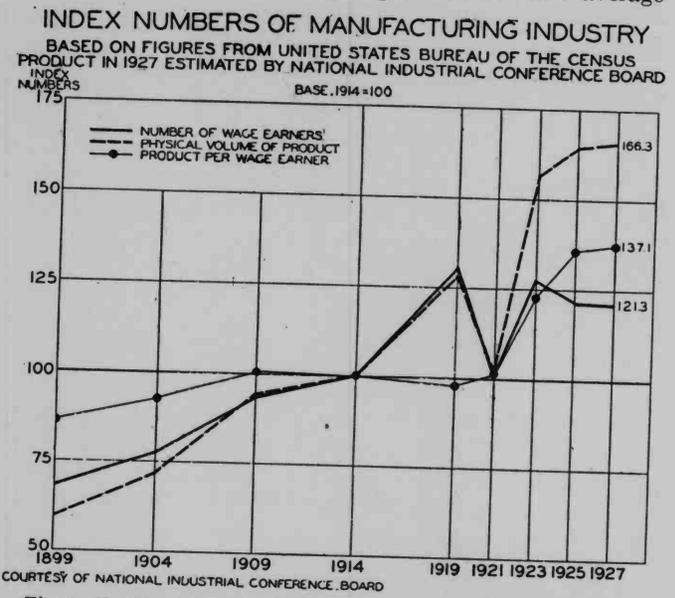


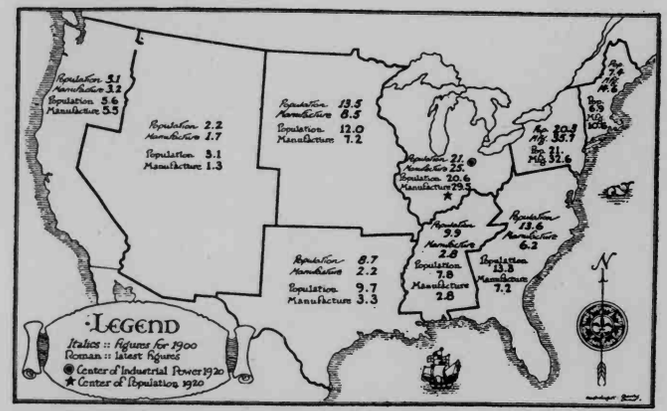
Fig. 2—Certain effects of "change in the rate of change" of American industry are presented graphically. In manufacturing, the physical volume of production has increased since 1923, but the number of wage-earners has decreased.

agricultural worker can now care for 34 acres. Under favorable conditions, he can care for a much larger acreage than this. Prior to the invention of modern machinery, one worker could take care of but 12 acres of crops.[10]

The whole map of industry is undergoing pronounced changes as illustrated in Figure 3. Mr. Irving S. Paull,

[10] "A Look at the Foundations," *Printers' Ink Weekly*, Sept. 9, 1926.

in describing this map of American Industry, says: "The map of American Industry can't be framed and hung on a wall; it is more like a moving picture than a map, moving rapidly in some industries, slowly in others, and in some instances standing practically still. We know with some accuracy how our population has moved. From a point thirty miles east of Baltimore in 1790, its center has moved in 130 years to a point in southwestern Indiana. This line is fairly due west." [11]



(From *"The Changing Map of Industry,"* by Irving S. Paull, *Nation's Business Magazine*, May, 1927, page 15.)

Fig. 3—Percentages of Population and Manufacturing Value for 1900 and 1923.

This map shows for the major divisions of the United States, the shift in manufacture in relation to population for the last quarter century.

At the beginning of the century, New England had 7.4 per cent of the population and produced nearly 15 per cent in value of our manufactures. The last figures show that the six states have 6.9 per cent of the population and make 10.6 per cent of the manufactures. The Middle Atlantic States, New York, Pennsylvania and New Jersey, have a slightly larger percentage of population than in 1900 but do not make so great a part of our manufacture.

The great growth in manufacture has come in the East North Central States, Ohio, Indiana, Illinois, Michigan, and Wisconsin. The automobile industry is undoubtedly one of the factors that help to explain this.

"Westward the course of Empire takes its way," wrote Bishop Berkeley two centuries ago.

Westward the course of industry takes its way—but slowly.

[11] Paull, Irving S.: "The Changing Map of Industry," *Nation's Business Magazine*, May, 1927, p. 15.

When we note how machinery economizes human labor, we can understand how we have more leisure time than our grandparents. One expert stated: "We have prime movers in this country which make potentially possible the labor equivalent of 150 slaves for every man, woman, and child of our population. The mechanical power which can be developed at Niagara Falls is greater than that possible through the physical labor of the entire population of the United States." [12]

Business concerns are not always managed by the owner or owners. Management has become a profession. Management has a free hand, so long as it produces a reasonable return on capital, keeps the employees contented, and develops the resources of the business. Because management has developed a technique of its own, secrecy in business is disappearing. Experiences in production, marketing, industrial relations, and organizations are all pooled and helpful data are given publicity.

Competition has always been considered the life of trade, but that axiom is being questioned. Rather, coöperation is the life of trade. Witness the fact that the sales of farm and dairy products through coöperative marketing associations in the United States increased from $81,647,000 in 1913 to $164,284,000 in 1925.[13] In Portland, Oregon, 100 speciality retailers organized into an association for the purpose of decreasing advertising costs and increasing general efficiency.[14] In addition, we have hundreds of industries combined into various associations for the purpose of benefiting the group. In some respects, competition is present—often keenly present; but it is a competition built upon the coöperation of related units.

As a result of intensive selling and attractive advertising, the modern consumer buys more goods than did his

[12] From a speech by Mr. C. E. Skinner before a convention of the N. S. E. at St. Paul in 1925. See *Nation's Business Magazine*, December, 1925.

[13] "Co-operatives Report Big Increase in Sales Volume," *Printers' Ink*, Sept. 23, 1926.

[14] "These Specialty Shops Are Giving the Department Stores a Battle," *Printers' Ink*, Oct. 14, 1926, p. 156.

parents or his grandparents. On the consumer's part, most of this buying is without an adequate knowledge of the quality of the goods purchased. For this reason, the consumer is more than ever dependent upon the honesty of the maker and the seller. Honesty in business is more important than ever before, and the largest corporations are the most jealous of their reputations. The former slogans, "The public be damned," and the Barnum attitude, "A sucker is born every minute," have been replaced by "The public be pleased," and "Business must render service."

The business man's attitude toward his workers has changed in the last century. A few decades ago, the captain of industry usually upbraided his employees where all the other workers could hear and see the reprimanding. Fellow workers were called into the manager's office to hear the "hard-boiled boss give 'em hell." Any one who questions the decrease in the arrogance of the employer toward the employee need but discuss the matter with some of the older business men who had charge of construction jobs twenty years ago and who are in charge of similar work now. In those days, the boss was selected for his ability to knock men down faster than they could knock him down.

Capital and labor have not, like the proverbial lion and lamb, yet lain down together; but they have learned to coöperate with each other in many ways. Labor itself is becoming capitalistic by its ownership of common stocks. One of the leading automotive corporations had 1,927 stockholders in 1917. In 1924 the company had 66,097.[15] One statistician found that only 7 per cent of the stock of corporations in this country is owned by millionaires. People having average annual incomes of less than $12,500 own 50 per cent of corporation stocks.

The above data and hundreds of other statistics indicate

[15] *Advertising and Selling Magazine*, March 25, 1925, p. 40.

that the same old forces that lifted man from the slime of prehistoric ages are operating in business to-day. Every observant business man knows what is meant by the terms "struggle for existence," "survival of the fittest," "adaptation," and "variational factors." He sees that more than change is taking place. He knows, if he is wise, that there is also a change in the rate of change. "The new American tempo" is here.

Causes of the new American tempo.—Robert R. Updegraff,[16] who coined the term, attributes the change in the rate of change to five causes:

1. Invention.
2. Transportation.
3. Picturization.
4. The World War.
5. Availability.

We need only comment on the causes which he presents. The part that invention has played in modern life and business and will continue to play is obvious. Were it not for the engineer, we should still be cooking over fires of wood, pumping our water from a well in the back yard, sitting at home on Sundays and evenings, writing our letters in longhand, and taking months to cross the Atlantic. Transportation has helped to destroy provincialism in thinking and living. We seldom admire the old just because it is old. We see how strangers live and we adopt some of their thinking just as the Renaissance was brought about by the crusaders who traveled in new lands and acquired new wants thereby.

Picturization is illustrated by the moving picture. Time was when the faculty member of a university could recognize the countrified freshman on the campus. It is more difficult to do so to-day, because the rural boys and girls attend the moving picture shows, know how to conduct

[16] Updegraff, Robert R.: "The New American Tempo," *Advertising and Selling Magazine*, May 5, 1926, p. 19.

themselves at a tea, and what style of clothes to wear. The "black bottom" may have begun in the East, but the Westerners, as a group, know how to do it just as well as the Easterners. The number of pictures in advertisements and newspapers has increased, because "there are so few word-minded people." According to G. Lynn Summer,[17] in the course of six years, 1919 to 1925, we had an increase in population of 8 per cent; but an increase in morning newspapers of 27 per cent, in evening newspapers of 23 per cent, in Sunday newspapers of 53 per cent, and in monthly magazines of 67 per cent. In the same period the amount of advertising increased 63 per cent.

The World War had a pronounced effect on the manufacturer, for it disclosed how he could easily and quickly change his factory from manufacturing typewriters to making war materials. Businesses which had made the same product for generations caught a new vision when the government showed them the possibilities of new products and adaptations of old methods. Furthermore, the people at large learned to think in terms of the big, the stupendous, the unusual. Each day had a new thrill as the overseas events were read. The dowager and the spinster came out of their exclusive caverns, mingled with the common herd, and found that life had new meanings and new thrills. We acquired the habit of thrills—one of the most difficult habits to overcome. The American public never had quite so exciting an existence as it did during the World War, when time was filled to the utmost with breath-taking reports of victories or impending disasters.

The availability factor has been brought about by the chain stores, large scale production, departmentalized drug stores, motorized libraries, artistic window displays, and installment buying. If a resident of California wishes an article and the trains cannot bring it quickly enough, the airplane will cut down the waiting time a few hours.

[17] Sumner, G. Lynn: "Something Has Happened Since 1920," *Advertising and Selling Magazine*, Aug. 11, 1926, p. 19.

To the above factors, suggested by Mr. Updegraff, we should add four others:

1. The development of science.
2. Universal education.
3. The cumulative effect of changes.
4. A recognition of the biological principles of variation and adaptation.

The development of the scientific view of the universe and of human behavior has had a greater effect upon us than we realize. It is but a few generations ago that the great mass of mankind attributed effects to supernatural rather than to natural causes. When man cannot find a logical explanation of his experiences and surroundings, he invents emotional interpretations. Because of the ready explanations of superstition and insistence upon the following of the trodden paths, man had little need or desire to explore the new or the unknown. He followed tradition. To-day, the scientist questions all preconceived ideas. When he can substantiate his hypotheses with incontrovertible data, he announces the discovery of a law. If his data do not explain the phenomena, he presents only his results and perseveres in the hope that he may serve science. Pure science has given us our basic concepts, and upon these basic concepts we are building further applications. Each scientific discovery paves the way for additional inventions and new modes of living. In many of the more remote regions of this country the natives still attempt to explain phenomena, indeed, life itself, in terms of the magical and the mysterious.

However, were it not for our system of universal education, the public would seldom learn of the scientist's discoveries. In most states, every child is required to attend school, and the teachers, in turn, are also required to meet certain standards of preparation for their work. Sixty-three per cent of all children complete eight years of school work. Fourteen per cent are graduated from high school.

Of course, when one attempts to put his finger on *the* causes of the new American tempo, he tends to reason in circles. Change in the rate of social and business change

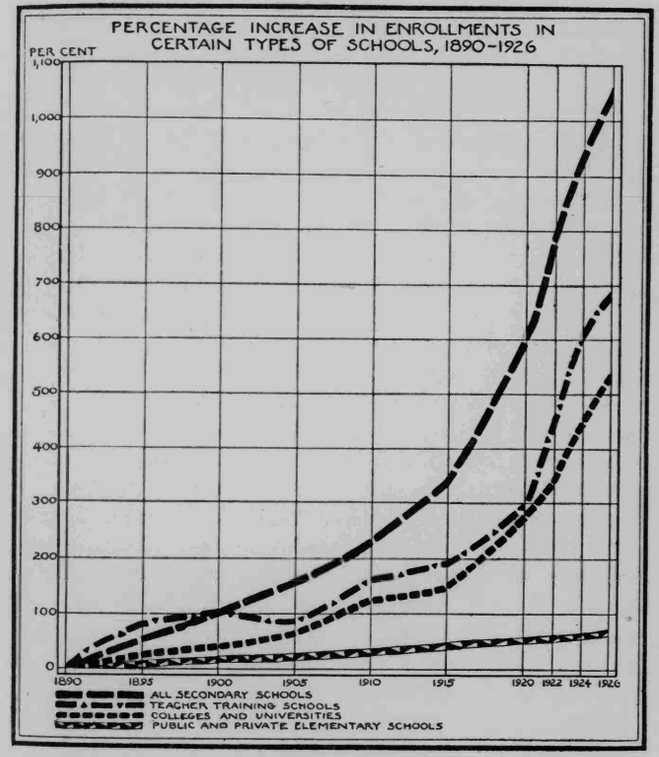


Fig. 4—From the "Statistical Survey of Education," 1925-1926, Bureau of Education, Department of the Interior, Bulletin, 1928, No. 12, page 3.

is furthered by the cumulative effect of previous changes. When advertising and engineering secured a sure footing, each branched out into new fields, and some of these branches, in turn, gave rise to additional branches. Indeed, it is impossible to point to any one cause, or to any definite

group of unrelated causes, for these changes. Some say that the engineer and the advertising expert are the causes; but they could not have progressed without the aid of many other agencies. One change brings other changes. The situation might be compared to that of a pyramid which rests upon its apex. At least, so it seems at first thought; but the old biological principles of variation and adaptation are merely expressing themselves less in man as an organism and more in man's control of his environment. When we study industrial occupational adaptations, we realize how man is obeying the old biological principle of adaptation.

Adjustment to change is the basic attitude for the business man.—Even though the business man cannot prophesy the great changes that will occur in the distant future, he can adapt himself to the changes occurring in his own time. Like the savage, he must occasionally "put his ear to the ground" to get the tendencies of the times and then prepare to meet them. His guiding attitude must be that of expecting changes and preparing to meet them. When we study the data of American corporations, we find examples of adaptation. According to the National Industrial Conference Board, 17.9 per cent of manufacturing establishments were operated by corporations in 1900. In 1919 the incorporated establishments constituted 31.5 per cent of the total. The incorporated establishments employed 86.5 per cent of all wage-earners and produced 87.7 per cent, in value, of the manufactured products.[18]

Business men often assume that the bigger the industrial establishment, the greater its efficiency. This is not always true. One unit of measurement that is being used as a yardstick of efficiency is called the "K.M.H." and is based upon what an employee does in 1,000 working hours. When applied to 14,000 manufacturing plants, this method of estimating efficiency showed great differences in man-

[18] Giles, Ray: "Can the Minnows Compete with the Whales?" *Advertising and Selling Magazine*, March 10, 1926, p. 19.

agerial ability. Some industries produced 20 times as much value as others for the same amount of labor. The average variation between companies in the same line of industry was found to be 13 to 1. Interesting to note, the little manufacturers averaged a higher rate of output and at less cost than the big corporations. In only 3 out of 53 industries did the largest companies have the highest rate of output. Conversely, in 35 out of 53 different industries, the smaller companies had the higher rate of production.[19]

These figures suggest that business must constantly adapt itself to changing conditions. Some concerns are doing it, and thus surviving in the economic struggle for existence. At present we are hearing much about the electric refrigerators. The manufacturers of ice refrigerators might assume that they must either make the iceless kind or go out of business; but that does not follow, because 40 per cent of American homes have no refrigerators at all. When a concern finds a market slipping away, it is necessary to adapt itself to the new conditions and to uncover the undeveloped markets.

In 1914, 299,029 bicycles were manufactured. The casual reader would assume that fewer were made in 1923. As a matter of fact, the number went up to 486,177. The makers found new markets. Of all the hopeless businesses, the snuff business might be considered the most unprofitable. Yet the figures show that one pound of snuff is sold for every ten pounds of pipe and chewing tobacco. The American Snuff Company in 1926 earned $13.05 per share on its common stock of $11,000,000. This company adapted itself to the new conditions.

When prohibition went into effect, some of the manufacturers of bars and saloon equipment changed their products to fit the restaurant trade and have gone on to continued prosperity with the increase in the custom of dining out. When the radio threatened the phonograph industry,

[19] Parsons, Floyd W.: "Our Partnership with Automatons," *Advertising and Selling Magazine*, March 6, 1920, p. 3.

the more alert concerns adapted their own machines to the radio and thereby improved the phonograph. Most of the cotton manufacturers must move southward or perish in the struggle. Some have already done so to their profit, while others have determined to stick to the old places at the risk of perishing.

The new American tempo requires study and research on the part of business. According to Robert R. Updegraff: "One Chicago corporation appropriated $21,000,000 for the purpose of keeping ahead of the new competition. If I do not misjudge the temper of the American people, it is going to require more ingenuity in the future to keep them interested and to keep a business prospering than ever was needed before. Any man who thinks he has found a royal road to success, and rests on his discovery, is very likely to find his royal road abruptly turning into a dead-end street. Any business executive who does not closely follow the news of science, engineering, economics, and business these days, and keep constant watch of social developments, relating them in his mind constantly to his own business, may suddenly find himself in a backwater eddy. On the other hand, alert business management, watchfulness of trends, quickness to grasp new ideas and to test them on a laboratory scale as possible additions to its 'bag of tricks,' will find the America of the next few years a mighty fine place in which to do business." [20]

The fundamental psychological concept for the business man is that of adjusting himself to change or the variation in man's wants and modes. The business man is the servant of society and must keep in touch with the many changes which are taking place in the public mind and in the methods of fellow business men. In view of the myriads of eddies, falls, swirls, waves, and currents in the present stream of American living and business, it is highly essential that the modern business man acquire an all-pervading

[20] Updegraff, Robert R.: "Does Business Need a New Bag of Tricks?" *System Magazine*, June, 1927, p. 744.

attitude of adaptation to change. This attitude should color every plan and schedule for himself and his business. Such an attitude is not only basic but necessary to the business leader's success, and the underlying principle is as old as life itself. Dame Nature is simply traveling in new vehicles.

Projects.

1. How can we enable the individual workers to adapt themselves to the new American tempo as illustrated in this need:

A twenty-eight-year-old-musician, out of work, came to me. During four successive seasons he had played with Sousa's Band. In periods between the tours he had played in several theater orchestras, including some of the better orchestras in New York City. He had been let out of his most recent job because of the installation of the Vitaphone at the theater which employed him. With all of his skill, he was finding it increasingly difficult to find steady work. At the age of twenty-eight he wanted to turn his back on it all and take up something else.

These instances are typical of the changes continually taking place in industry at the present time. One skill is displaced by another—human or mechanical. One technique has to adapt itself, or the workers soon face the task of rehabilitation with all of its uncertainties and painful readjustments. It does not take a World War to give us a vast army of worthy workers who have need of vocational rehabilitation. Such an army is the annual product of our rapidly changing industrial and business environment.[21]

2. Is a high speed of living conducive or detrimental to the happiness of people? In what ways does the new American tempo tend to decrease happiness? To increase it?

3. Are we making ourselves more comfortable in our present methods of living? Do we have more or less peace of mind than our grandparents had? How does our happiness compare with that of the savage?

4. Has our system of education prepared us to utilize our additional spare time? What changes shall we have to make to utilize extra spare time?

5. So far, the mercantile chain systems have had their greatest effect upon the independents. What psychological devices do

[21] Hanna, J. V.: "Standards Needed in the Testing of Aptitudes," *The Vocational Guidance Magazine*, March, 1929, pp. 259, 260.

the successful independents use to enable them to compete with the chain stores?

6. From 1750 to 1880 was the period known as the Industrial Revolution. From 1880 to the present time is called the Commercial Revolution. How do these two periods differ in their business methods?

7. Mr. S. L. Rothafel, head of the Roxy Theater of New York City, in the *Magazine of Business*, May, 1928, "Speed and Business—The greatest thing I have learned from entertaining the public," says:

> If I were a merchant or a manufacturer and had the problem of making things for, or selling things to, the public in this age of speed, I am sure that I should make use of this same discovery that has made the Roxy Theater a big box-office success this past year; that speed is style, color, change, light, brevity, contrast, sweep, with a reasonable amount of motion thrown in. . . . I should do little rushing and much planning, little straining and much studying.
>
> I should set down on a sheet of paper eight words,
>
> | | | | |
> |---|---|---|---|
> | STYLE | BREVITY | CONTRAST | COLOR |
> | CHANGE | LIGHT | SWEEP | MOTION |
>
> and I should apply each one of them in turn to my business, or to any particular problem of my business, until I had found how to speed it up to a point where it synchronized with the speed of American life as it is being lived all over this broad land to-day.

Give concrete examples of how the corner grocer, the restaurant manager, the church, and the college might apply the above principles to their business or activities.

8. Is the present era of mergers economically sound or is it artificially stimulated by the "finder's commission"? Has the entrepreneur of a former period changed to a promoter who seeks his reward in the finder's commission? Read *Printers' Ink Weekly*, Nov. 22, 1928, pp. 161-164.

9. What effect does judicial law have upon slowing up the change in the rate of change of business as illustrated in this extreme example?

> I beg to call the attention of the vast army of beauty adjunct advertisers to an unrepealed law in France, the home of the beauty crusaders, which was enacted during the reign of whatever Louis decorated the throne of France in 1770. It reads, in part, as follows:
>
> "Any one who entices into marriage a male subject of his Majesty by means of rouge, or scent, or artificial teeth, or false hair, shoes with high heels, crinolines, or false hips will be prosecuted for fraud, and the marriage declared null and void."

> What a lot of progress we have made. No hips nor crinolines, not much hair, and four out of five still seem to have trouble with their own teeth. We will pass over the other items, except to say that no man would be lured into marriage if advertising had not made these items assets instead of liabilities.—Amos Stote in *The London Letter*, "Advertising and Selling," Feb. 6, 1929, p. 32.

10. Are successful, elderly business men competent to advise younger men in business? Are the methods of achieving business success the same to-day as they were a generation or two ago? Are the characteristics of the successful business pioneers of America—initiative, resourcefulness, and quickness of decision—also required to-day? Does the newer business man require more analytical ability and more scientific training?

11. Obtain data of total output by years of any industry and plot the figures in a graphic chart. Is the new American tempo evident in the form of an accelerated rate of change with the progress of time? Discuss the psychological factors that aided in changes in the rate of change.

12. Can all the people ever grasp the "spirit of the game," which is essential to adaptation to American living and business? Will the pleasure derived from playing the game and from a wholesome adjustment to the life of this age be sufficient to make life worth while in itself? How can psychologists aid the next generations in attaining a satisfying mental adjustment to the requirements of life and economic and social happiness?

CHAPTER III

Behavior Patterns

The Personality Traits and "Mind" of the Business Man

A behavior pattern of the executives in business.—We have just finished a chapter in which we claimed that the basic attitude of the business man should be that of expecting and adjusting himself to changes. His controlling attitude should be one that keeps his thinking in harmony with the present change in the rate of change. Such an attitude implies a state of mind. However, the modern psychologist does not use the term "mind" as a power or a force that is to be contrasted with the body. Mind, to him, is merely a convenient word or term under which he groups all the conscious and the near conscious activities of man. *The best way to understand man's mind is to approach it through a study of what man does; the activities that we can observe or measure.*

If we wish to find out how the minds of business men differ from those of other people, we must observe what business men of varied ability do. If we wish to know wherein the minds of big or able business men differ from those of little or unsuccessful ones, we must compare the activities of the big men with the activities of the lesser group. Whenever we study two individuals or two groups of people, we find that they have characteristic ways of behaving which distinguish them from other types of persons. These distinguishing ways of thinking and acting are called "behavior patterns." Psychologists have found that no one or two traits cause a man to be a successful business man. All human beings possess the same traits,

but they differ in the degree or amount of possession of each trait. That is, if we were to list all the traits or qualities of the one hundred greatest men of the world and then list the qualities of one hundred unimportant men, the two lists of traits would be the same. However, the two groups would differ widely in the degree or extent of possession of each trait on the list. For example, the second group of men would have less intelligence and initiative than the first group; but high intelligence alone does not enable the youth to become a leader, nor does a high degree of initiative. Success depends upon a proper combination of essential elements.

The skilled housewife's dough is a correct combination of the proper ingredients, and, when it is given the favorable environment of the oven, delicious cake results. Similarly, the great business men are those who have the effective "personality ingredients" or patterns of behavior. Naturally, we wish to know the distinguishing behavior patterns of business men. We want to know the extent to which high-salaried executives have behavior or reaction patterns that are different from those of the low-salaried men in business. A study has been made of business men of five grades of income and the results indicate that certain measurable differences do exist among them. These differences have been statistically treated and the questions can be used for employment purposes. Forty-one situations were described to 150 business men of various incomes. The answers of these men were then treated quantitatively. The questions which gave differential values were the following:

EXECUTIVE REACTION PATTERN

DIRECTIONS.—*Underline the term or degree which most adequately describes your likes, beliefs, record, etc. Do not try to think of what you would or should do, but answer according to what you have done.*

1. Number of meetings of a technical nature or of trade asso-

ciations attended—local organizations as well as national or state:

a. Ten or more per year.
b. From 5 to 10.
c. From 1 to 5.
d. Few or none.
e. None.

2. Activity in trade or technical association meetings:
a. Took very active part as a leader.
b. Frequently took part in discussions.
c. Occasionally asked questions.
d. Rarely took part.
e. Never took part.

3. Time devoted to personal appearance:
a. Large amount.
b. Considerable amount.
c. Moderate amount.
d. Few minutes a day.
e. Neglect it.

4. Amount of study given to subjects related to my business since leaving school:
a. Spent all available time on such subjects.
b. Studied business subjects frequently.
c. Occasionally spent time in study of my business.
d. Seldom gave any.
e. Never gave any.

5. When I have read the daily papers, I have read items relating to business:
a. Almost exclusively.
b. Much of the time.
c. Frequently.
d. Occasionally.
e. Never, except by accident.

6. My record of leadership in my youth:
a. Frequently organized games, teams, or clubs.
b. A leader in activities.
c. Little marked leadership.
d. Willing to follow other leaders.
e. Disregarded playmates.

7. I actually associated with men whose ability was:
a. Much greater than mine.
b. Somewhat greater.
c. About the same.
d. Slightly less than my own.
e. Considerably less.

8. When I was not busy taking recreation or taking care of routine matters and had some time for thinking along any line, I devised new methods, plans, or systems. The percentage of such available time devoted to improvements was from:
a. 75–100 per cent
b. 50–75 " "
c. 25–50 " "
d. 5–25 " "
e. 2– 5 " "
f. 0– 2 " "

9. My thinking of improvements dealt with problems relating to (underline as many as apply):
a. Organization of company as a whole.
b. Organization of work within one department.
c. Organization of work between departments.
d. Stimulating employees.
e. Cutting costs.
f. Increasing sales.
g. Better service to customers.
h. New mechanical inventions.
i. Better financing.
j. Helping society in general.

10. My family influence has:
a. Greatly stimulated me to do my best.
b. Stimulated me slightly.
c. Had no effect—good or bad.
d. Had slightly negative effect.
e. Had pronouncedly negative effect.

11. A rival or rivals:
a. Stimulated me strongly and I tried to beat them.
b. Stimulated me slightly.
c. Did not affect me at all.
d. Discouraged me slightly.
e. Discouraged me greatly.

12. I met my financial obligations:
   a. Always promptly.
   b. Fairly promptly.
   c. As best I could.
   d. Sometimes with failure.
   e. Sometimes with neglect.

13. In times of failure or discouragement:
   a. I persisted.
   b. I persisted to a limited extent.
   c. I thought of ways out of the difficulties and applied them to the problems.
   d. I thought of remedies but did not apply them.
   e. I just quit and regretted that I was not trained to solve them.

14. My energy supply:
   a. Compels me to keep busy at all times.
   b. Is plentiful.
   c. Is enough to meet my needs.
   d. Is small and I force myself to keep going.
   e. Prevents my attaining many possibilities.

15. My attitude toward risks:
   a. I took many serious business risks.
   b. I took a few serious business risks.
   c. I took no serious risks.
   d. I took a few minor chances.
   e. I took no serious or minor chances.

16. The extent to which I tried to make a favorable impression on important persons:
   a. I made definite plans and devoted much time to impressing the right persons.
   b. I devoted a slight amount of time to making a good impression.
   c. I seldom planned to do so in advance, but, if opportunity arose, I tried to make a good impression.
   d. I never noticed such opportunities.
   e. I disliked the practice in others and never indulged myself.

17. Problems or difficulties around me:
   a. Stimulated me greatly.
   b. Stimulated me mildly.

   c. Had no effect.
   d. Caused slight discouragement.
   e. Caused pronounced discouragement.

18. Criticisms from others regarding my work have:
   a. Greatly stimulated me to do better.
   b. Slightly stimulated me to do better.
   c. Had no effect.
   d. Worried me.
   e. Caused resentment.

19. Anticipating problems before they arose:
   a. Gave them much thought.
   b. Gave them some thought.
   c. Planned to meet present problems only.
   d. Let all problems take care of themselves.
   e. Passed them on to experts.

20. When conversing with superiors:
   a. I felt at ease and talked freely.
   b. I talked freely, but was not at perfect ease.
   c. I talked fairly freely, but was ill at ease.
   d. I talked little, because I was ill at ease.
   e. I felt inferior and said nothing.

21. When conversing with inferiors:
   a. I tried to make them feel at ease.
   b. I let them talk.
   c. I talked more than they.
   d. I monopolized the conversation.
   e. I tried to make them feel inferior.
   f. I did not think of any differences between us.

22. In group discussions:
   a. I said nothing.
   b. I spoke occasionally.
   c. I spoke when I had something worth saying.
   d. I dominated the conversation.

23. The amount of time I devoted to work has been:
   a. Far too much to enjoy life fully.
   b. About the right amount.
   c. Too much.
   d. Too little.
   e. Decidedly too little.

24. Ability to influence others:
   a. I could influence large numbers of persons.
   b. I could influence small numbers of persons.
   c. I could influence some individuals.
   d. I could influence those who were under obligations to me.
   e. Had difficulty in influencing any one.
   f. Don't know—I never tried.

25. The number of technical or trade journals I read fairly regularly:
   a. 5 or more.
   b. 3 to 5.
   c. 2 or 3.
   d. 1 or 2.
   e. None.

26. My interest in my past work has been:
   a. Very great and enjoyable.
   b. Usually enjoyable.
   c. Slightly enjoyable.
   d. Little or none.
   e. Mostly negative.

27. The number of my friends who would help me in putting across a really good idea:
   a. A great many—50 or more.
   b. Many—10 to 50.
   c. Few—5 to 10.
   d. Very few—1 to 5.
   e. None.

28. The extent to which I have gone out of my way to help others:
   a. Often inconvenienced myself.
   b. Occasionally inconvenienced myself.
   c. Seldom inconvenienced myself.
   d. Never inconvenienced myself.
   e. Believed in taking care of myself and in letting others do the same.

If the reader will check the appropriate items and then refer to the key in the Appendix of this book, he can score his answers and obtain an estimate of the financial rating

of his own business behavior pattern. The answers which have a plus value in the key are characteristic of the higher-salaried business men. The minus answers apply to the lower-salaried groups. The scorings of the answers to the 28 questions were not made during an "armchair" study, but were determined by a statistical analysis of differences in the behavior patterns. It would be difficult for a person to obtain the maximum rating by reasoning out the answers with the greatest plus values. For instance, in question 10, the highest plus value is given to the man who says that his family relations had a slight negative effect in stimulating him to do his best.

The traits in which the high-salaried business men and the low-salaried business men did not differ in their reactions were:

1. The extent to which they made and followed a budget for personal expenditures: those who made no budgets and those who made rigid budgets of personal expenses were found in the low-salaried and the high-salaried groups in equal proportions.

2. Their beliefs as to the *main* function of the big business executive. The five possible answers to this question were:

a. Be thoroughly acquainted with, and personally handle, all possible details of the business.

b. Be thoroughly acquainted with details, but delegate them to others for attention.

c. Establish general policies and plans and delegate operations to subordinates.

d. Establish policies and discover new methods and give them to subordinates for execution.

e. Give each subordinate definite functions to fill and see that he performs his functions.

3. The number of correspondence school and evening school courses taken. This similarity may have been caused by the fact that the two kinds of courses should have been separated in the question.

4. The fact that they did not keep a record of their ability and of past performances.

No differences were found in the above four traits, but this does not prove that the traits have no importance in the development of the big business executives. It merely means that no statistical differences were found among the various grades of business men investigated here.

A general personality trait of men in business, introversion or extroversion.—Investigations indicate that humans can be separated into two general classes—"introverts" and "extroverts." Introverts are characterized by their "shut-in" personality. They do not share their joys and sorrows with others, but keep them to themselves. They are largely self-sufficient for their emotional outlets. Anger, blushing, and laughter are examples of emotional outlets and the introverts express them within themselves; that is, their emotions are introverted. Daydreaming is an example of an introverted emotional outlet.

Extroverts, in contrast, express their emotional outlets in action and in seeking the society of others. They do not sit alone with their thoughts, but depend upon others or upon activity for their happiness. Introverts are men of thought and extroverts are men of action. Scientists tend toward introversion; business men, toward extroversion. Foremen and executives whose duties require the supervision of others are extroverts. The key executives of industry incline toward ambi-version, or a middle position on the scale of introversion-extroversion. Office workers, clerks, and stenographers incline toward introversion. Accountants and research engineers are pronouncedly introverted.

It should not be assumed that people are of either one type or the other. Rather, they tend to group themselves in the center of the scale. Each person has some qualities of each type and his classification depends upon the degree to which he is introverted or extroverted rather than upon the absolute presence or absence of the characteristic traits.

Laird has devised a scale for the measurement of introversion and extroversion. The personality signs he has listed are:

1. The introvert blushes easily; the extrovert rarely blushes.
2. The extrovert laughs more readily than the introvert.
3. The introvert is usually outspoken; the extrovert is usually careful not to hurt the feelings of others.
4. The extrovert is a fluent talker; the introvert can prepare a report in writing more easily than he can tell it in conversation.
5. The extrovert loans money and possessions more readily than the introvert.
6. The extrovert moves faster than the introvert in the routine actions of the day, such as walking, dressing, talking, etc.
7. The extrovert does not take particular care of his personal property, such as watches, clothes, etc.; the introvert is found continually oiling, polishing, and tinkering.
8. Introverts are usually reluctant about making friends among those of opposite sex, while extroverts are attracted by them.
9. Introverts are easily embarrassed by having to be in front of a crowd.
10. The extrovert is a more natural public speaker.
11. The introvert likes to argue.
12. The introvert is slow about making friends.
13. The introvert rewrites his letters, inserts interlineations, adds postscripts, and corrects every mistake of the typist.

Personality signs revealed in thinking and attitudes are:

1. The introvert worries; the extrovert has scarcely a care in the world.
2. The feelings of the introvert are easily hurt; the extrovert is not bothered by what is said about him.
3. The introvert deliberates in great detail about everything —what to wear, where to eat, etc., and usually tells one why he decided to do what he did.
4. The introvert rebels when ordered to do a thing; the extrovert accepts orders as a matter of course.
5. The introvert is urged to his best efforts by praise; the extrovert is not affected by praise.
6. The introvert is suspicious of the motives of others.

7. The introvert is usually radical in religion and politics; the extrovert—if he entertains any opinions—is usually conservative.
8. The introvert would rather struggle alone to solve a problem than to ask for help.
9. The introvert would rather work alone in a room than with others.
10. Extroverts follow athletics; introverts read books and "high brow" magazines.
11. The introvert is a poor loser.
12. The introvert daydreams a great deal.
13. The introvert prefers fine, delicate work (die making, accounting), while the extrovert prefers work in which details do not bother.
14. The introvert is inclined to be moody at times.
15. The introvert is very conscientious.

The study of personality traits or patterns[1] of this kind has value to the business man, because those persons who are most introverted can be influenced by methods that are not successful with the extroverts. Praise, caution, and exactness appeal to introverts. Athletics, speed, chance, and challenges appeal to the extroverts.

As salesmen are decidedly extroverted, it is hopeless to try to compel them to fill in and mail each day very detailed reports to the home office. Salesmen should have a minimum amount of clerical work to perform. Their paper work should be done by women, because women, as a group, are more introverted than men. Workmen who are to be promoted to supervisory positions should be extroverts rather than painstaking and retiring introverts.

Neural patterns and the nervous system.—The business man is benefited by studies of characteristics of human beings and their behavior patterns; but he should also have a general knowledge of the bodily structures that underlie these forms of behavior. He should know a few fundamental facts of the neurological mechanisms and causes of our reaction patterns. The bodily mechanism that is basic

[1] Laird, Donald A.: "How Personalities Are Found in Industry," *Industrial Psychology*, October, 1926, pp. 1, 2.

to our conduct and personalities is more complex and marvelous than any business organization. Our nervous system has millions of nerve cells, and, before we can do anything, certain changes must take place within it.

The neurones or nerve cells are not rounded in shape, as are most tissue cells, but have many little branches. These branchlets may be greatest in number and complexity at one end. The neurones do not grow together where they approach other neurones, but remain distinct cell units.

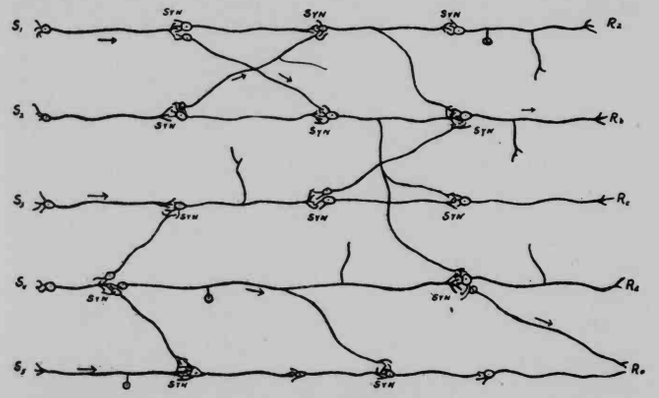


Fig. 5—Showing the many possibilities of connection between stimuli and reponses, through many alternative synaptic junction points between neurones. Some of the synapses are shown by the symbol syn.

The junction points where the neurones are near enough to each other for the nerve current to pass from one neurone to another are called "synapses" or "synaptic connections." The nerve current *jumps* from one neurone to the next. Nerve currents are chemico-electrical impulses which travel at the rate of about 300 feet per second.

For the nerve current to traverse one foot of nerve cells in certain patterns or series requires about 1/400 of a second. When a nerve current is rushing through a series of synapses in the cortex of an intelligent person, any one cell has less than 1/100,000 part of a second in which to

transmit the impulse to the next cell. The exact nature of the nerve current is unknown. It appears to be neither wholly chemical nor wholly electrical. We do know, however, that it does not flow as a steady stream, but rather as a series of rapid impulses. The neural impulses that hold the extended hand in a steady tension are transmitted at the rate of about 40 per second. In old age, the speed of the pulsations may decrease, as shown in the quivering hand of the old man who cannot hold his teacup so steadily as he did in his youth. The flow of the current is somewhat similar to the alternating current in electricity. The best descriptive term of the neural excitation is not nerve current but "neural impulse." For simplicity's sake, we use nerve current rather than the more technical term, "recurrent neural impulses." The neurologists are convinced that each nerve cell has an individuality of its own and that it never grows fast to cells with which it is in contact. It is independent as a living unit. As a functional or reaction unit, it is a part of a series of other cells which act with it.

Perhaps we can illustrate the principle by electricity. If we place the ends of two wires near each other, the current will jump from one wire to the other. The closer the wires are to each other, the lower the resistance and the easier the transmission or passage of the current. If, instead of one wire, we placed two or more wires near the charged wire, the current would jump to the nearest one rather than to the wire several feet away. In like manner, when a nerve impulse passes over a neurone, the particular neurone to which it will next go depends upon the amount of resistance encountered at the synapses.

We can also illustrate the tendency of the nerve current to follow the pathways of least resistance by the analogy of the way in which a human being tends to follow pathways through a forest. Let us assume that a person is at the edge of a forest and wishes to get to the other side. He will tend to follow the footpath which has already been

worn there by preceding travelers. Should there be few persons traveling that way, he will follow the pathways or places where he meets with the least resistance from obstructions, such as trees and rocks. Should he, however, find himself at the edge of a forest without any sign of a pathway, he would then have to break his way through the resistances and make a new path. And, should he travel that way again, he would tend to follow the pathway which he made on his first trip. Eventually, after many trips, he would travel over it far more quickly than he did on his initial trip.

The conduction of nerve currents is somewhat similar to our hypothetical traveler. Each pathway represents a *neural pattern,* or a mode of response which the nerve current will traverse in making a behavior response. If a pathway has never before been made, a new path must be developed, and we have what is called *learning.* Forming new neural pathways in the nervous system is the process of learning. That is why learning may be difficult and require real mental effort for most people. As we all know, learning is easier if we can relate the new subject to some well-known material. In such a case, it appears that we are not making an entirely new pathway, but are utilizing some of the old pathways. The student who has never studied finance finds it difficult at first because he must make many new pathways. He has few old pathways which he can utilize in part. So much for learning.

What is habit? Habit may be illustrated by the oft-traveled pathway through the forest. We know that we can travel with ease and without thought over an old route which we have traveled hundreds of times before. The habit is hard to break, because it is easier to travel the old pathway than to develop a new one. Should some one go with us through the forest and suggest that we take a path which is new to us, we would feel less comfortable and stumble more than we did over the old path.

Neurograms.—In our forest analogy of pathways we

did not illustrate the fact that the nervous system has many sets of pathways. The trapper may have his cabin at the foot of each of seven hills. On each of these hills, he may have a hundred pathways leading to a total of seven hundred traps. In the human brain and nervous system we have an incalculable number of pathways. The term "neurogram," coined by Morton Prince, refers to these brain paths that hold an experience. The terms "pattern" and "constellation" refer to the same facts. A "complex" refers to a number of related patterns of behavior caused by a series of related experiences. The "inferiority complex" is the result of a number of humiliating experiences and tends to influence the behavior in any situation where that neurogram has been stimulated. It is only through nerve currents and nerve pathways that we think, talk, act, and do all those things which are a part of human behavior.

The chief purpose in using the somewhat inadequate forest path analogy is to explain how nerve currents follow the course of least resistance; that nature provides some paths for us at birth, as in sucking; that new paths can be voluntarily made; and that it is easy for the current to traverse well-worn or established pathways. Also, any stimulus, such as a sound which does not travel over a nerve pathway, does not enter consciousness and has no existence in the mind of the person who could have heard the sound but did not.

The brain cortex.—The brain cortex is really the general manager of the nervous system. It is the part of the brain from which we get our motions and our notions. It is gray in color, because it is made up of the cell bodies and nerve endings of many millions of nerve cells, estimated to be about nine billion in number. It is not more than a quarter of an inch thick at the deepest parts and about a tenth of an inch in the shallow spots. It covers an area about eighteen inches square. The nerve cells, obviously, are very small. If certain types of the cells were laid side by side, it would take 27,000 of them to make a lineal inch.

The cortex is the control executive of the brain and nervous system. It has several assistant executives, such as the cerebellum, the brain stem, and the nerve centers along the spinal cord. Responses which are old in the race, such as the conveyance of the impulse in reflexes, are handled by the "assistants." An "assistant" is usually under the control of the master cerebrum, as when we carry a hot dish. The "assistant" may want to drop it, but the cortex compels us to hold on. Should the dish be unbearably hot, we would then have to drop it, because the old brain takes an emergency situation in hand, if the emergency is related to the survival of the individual.

The functioning of the neural pathways gives us our sensations, interprets these sensations, and does our thinking. For example, when a business man sees his stenographer, he does not have one reaction pattern for the stenographer in entirety; but he has one reaction pattern for her hair color; another tells him that she is efficient; another, that she is supporting her mother; another, that she was tardy this morning; another, that she is supposed to hand him a letter at this time; etc. All these various pathways are connected by *association* neurones. When one kind of pathway is aroused, that, in turn, tends to arouse other related pathways. In other words, one thing reminds us of another. A very large part of the cerebrum is made up of millions of association neurones, which connect with each other in the cortex. The complexity of the neural system is staggering to the imagination. The student may be unable to understand how there can be any continuity or organization in the operations of these millions of nerve cells, pathways, and patterns. Fortunately, the whole system is efficiently organized in the manner of a large business organization. The cortex is the general manager of our mental activities.

Association linkages.—The neurologists have made studies of the nervous system in order to explain many important facts about its action which we shall have to

omit here. We have, however, tried to explain in popular parlance how the nervous system operates in terms of neural pathways or patterns. So far as we know, any one neural pathway of the nervous system may become associated or connected with any other pathway. In our daily thinking, we know that we can think of any one thing and then at once think of some apparently unrelated topic. In our dreams we have all sorts of combinations of ideas. It is probable that, if we thoroughly understood the workings of the nervous system, we would find that all its connections which give rise to ideas of muscular acts are related or connected in a logical manner.

The facts described have been discovered from many painstaking laboratory studies of animal structure and behavior. The business executive is not so greatly interested in what takes place in the brain of the employee as in what the employee does as a result of the nerve current that traverses the pathways in his nervous system. Our interest in the mechanism of human behavior is largely for the purpose of obtaining a background for further observations and guidance in dealing with the behavior of other people.

We all know that events or experiences become associated with each other, and that these associations are individual and specific. One employee may quake with fear whenever the boss calls him into his office, because the boss once gave him a severe reprimand which made a strong impression on him. The scolding "shocked" his nervous system. His neural patterns differ from those of the same boss's little daughter, who shouts with joy when she sees her daddy. Her experiences with him have been of a more pleasant sort and her nervous system has not been stimulated as has that of the trembling employee. We use this method in training animals. The horse does not naturally stop when we yell "Whoa!" He has learned to stop because the two sets of neural pathways have become associated with each other—pain in the mouth and the particular sound made by the driver. The cat comes to us when we call "Kitty, kitty," because that sound has become associated with food and fondling. The hunting dog jumps with joy when he sees his master carrying a gun, because the gun has been associated or linked with pleasant hunting excursions.

By associations of neural pathways, any response may be linked with any stimulus. Pavlow, the Russian physiologist, showed that the salivary glands of a dog may be conditioned to secrete at the sound of a bell. Watson showed that a child may be conditioned, after several trials, so as to cry with fright at the sight of a rabbit, simply by striking on an iron bar whenever the child sees and reaches for the rabbit. The child can also be "reconditioned" by having the rabbit visible, but at a distance, when the child is eating. Gradually, the rabbit is moved nearer and nearer to the child until the sight of the rabbit becomes associated with the pleasant response of eating. On account of the many thousands of similar experiences which we have, we tend to have associative linkages of the same kind. If all our associations were of the same kind, we would all respond in the same manner to the same stimuli. If all our associations were different, we would have only chance responses in common. In the latter case, society would have to be organized on an entirely different basis.

To what extent do we give the same responses to a given set of stimuli? Let us use a simple kind of example. An association test was constructed for the diagnosis of the mentally abnormal. The assumption was that normal individuals would react in a more or less uniform manner and that the abnormal persons would make responses which deviated from those of the normal group. In the association test quoted here, 1,000 persons were asked to tell the first word that came to their minds when 100 stimulus words were read to them. Twelve of the stimulus words and the

majority responses to each are given in Table XI.[2] If we give the stimulus word "lamp" we shall probably receive the response "light." Within certain limits, the person who gives responses which are exactly the same as those of the majority of other persons may be considered to have associative linkages which are very similar to those of the majority of his group.

TABLE XI
COMMUNITY OF RESPONSE

Stimulus Word	*Response*	*No. of Replies in One Thousand*
lamp	light	650
eagle	bird	567
blossom	flower	467
dark	light	427
man	woman	394
river	water	393
tobacco	smoke	387
soft	hard	365
sour	sweet	349
black	white	339
Bible	book	338
window	glass	316

Whenever we set up situations or present stimuli to a large number of people, we find that we have some overlapping of responses. Why? Simply because some of the group have had the same kind of experiences and have formed the same kind of neural pathways or associative linkages. Some of these associations are pleasant and some are unpleasant, some are fortunate and some are unfortunate, for the individual.

A young man labored for years under the impression that he was, by nature, a poor student of mathematics. In grammar school, he thought that some children were naturally gifted in arithmetic, but that he happened to be born with a recalcitrant brain for arithmetic. This, however, was really not the situation. The cause of the weakness in arithmetic was an unfortunate series of associations

[2] Kent, G. H., and Rosanoff, A. J.: "A Study of Association in Insanity," *American Journal of Insanity*, vol. 67 (1910), pp. 37 ff. and 317 ff.

with the subject, brought about by the fact that, in his first course in arithmetic in a lower grade, the teacher taught the subject by banging against the blackboard the heads of the children who presented incorrect answers to the problems assigned at the blackboard. In addition to banging his head against the blackboard, she also scolded and shouted so that this man still has mental images of her angry face and rasping voice. In later years, when her influence wore away and a kind instructor made the subject interesting, he found that he could do work in higher mathematics as well as the average college student.

It is probable that heredity explains some of the causes of differences in behavior patterns among human beings, but each year the scientists seem to be losing interest in heredity as the cause of our human differences in behavior; and each year they become more convinced that our associations or experiences are the major influences in forming psychological differences. It is quite probable that the successful business men are successful, not because they were born with a forte for business, but because they had certain experiences which formed linkages that made business appear worth while and interesting. Had they had other experiences, some of them might have become equally interested in art or science. The reason why one man likes selling and another heartily dislikes it may be explained largely on the basis of the early associations of the two. Go back to the childhood of the man who dislikes selling and ask him whether he can recall occasions when he heard his mother berate the salesmen who called at his home.

Why is one woman very pleasing to one man and unnoticed by another man? Why will a girl "go wild" over a dissipated, worthless old reprobate when she knows a dozen kind and manly fellows who would make far better husbands than the hopeless wreck she admires? Is there some mysterious cosmic force that drives her on in spite of herself? So far as we know, the reason for her blind admiration lies in the fact that the "apple of her eye"

happens to be to her a composite of a number of pleasant experiences of her past life. His tone of voice, the twinkle of his eye, and his manner of greeting may merely be arousing the old pathways which were established in her childhood by the singing of a sweet old Sunday school teacher, a kind uncle who told her sea stories, and a southern gentleman whom she met in Memphis.

A judge once told his experience of granting five divorces to one man. Outstanding characteristics of each of his wives were red hair and large freckled hands. It is probable that, in his youth, this man was treated well by some woman of that type. Perhaps it was the Irish washerwoman who gave him cookies as he sat on her back steps and listened to her wit. She may have conditioned him so strongly that women of her type became his ideal.

Why should the business man understand neural patterns?—At first thought, the concept of neural patterns may appear to be an academic subject of interest to scientists but not to business men. The fact is, that one of the basic beams in our system of business and civilization today follows the neural pattern. In the Industrial Revolution which gave us division of labor, it was recognized that a workman can do far more work if he is allowed to perform the same operation continuously rather than to perform all the operations in the process. We accept, as axiomatic, the fact that 100 shoemakers who, each making a pair of shoes, from the cutting of the leather to the polishing of the finished shoe, cannot make nearly so many shoes as can 100 factory workers, where each man performs but one operation and then passes on the materials to the next worker. Each day, we marvel at the small cost of some intricate product and wonder how it is possible to make it so cheaply. Imagine the cost of a modern automobile, or a typewriter, or a cash register, if one or two men were to attempt to produce one of these individually under the old guild system. Using the same neural pattern of each employee saves an enormous amount of time and effort. Large scale

production has utilized this neurological law for productive efficiency. Modern business has capitalized this principle in the form of specialization of activity.

The importance of the neural pathway concept to the business man is beyond estimation. Another example of its importance is experienced by the employer who had talked to an employee, and who, after the employee had gone, then said to himself, "I don't think that I made an impression on him at all." Every salesman has talked to a prospect and failed to make the sale, and has said to himself, "Well, what I said to that fellow did not seem to register. I wonder why?" The reason why the executive and the salesman in cases of this kind do not make an impression on the other person is because they do not send their message over the established neural pathways of employee or prospect. While the salesman was talking to the prospect, the prospect's nerve currents were not traveling over the right kind of pathways. That is why the salesman often tries to find out the hobbies or interests of the prospect. He starts to talk about the prospect's interests and then gradually sends his message over some well-worn path in the prospect's nervous system. When a salesman fails to sell a logical prospect, he may or should say to himself, "I failed to find the right neural pathways in the prospect. Had I found the right pathways, the sale would have followed automatically." Accidental circumstances may build a pathway in a prospect, as in the case of a salesman who tries to sell a prospect a fireproof safe. He calls again and again, but he is a poor salesman. His message travels very lightly over the prospect's neural pathways. Then one night the prospect has a fire and the desired path is well established. One strong shock has made the path which the salesman could not make.

Objectively speaking, a fact is a fact, whether we recognize it or never hear of it. Psychologically, a fact becomes a fact only after it has been conducted over some pathway of the nervous system. The traveler who takes the Twen-

tieth Century Limited from Chicago to New York may pass over a hundred bridges, by a thousand houses, and within sight of ten thousand people. They are all there, objectively; but, if the traveler is absorbed in a book, they have negligible existence in his mental life.

The father of a college student may love his child intensely; but if that love is not registered in the nervous system of the son, it will not influence his conduct. Thousands of books may be on our library shelves, but they mean nothing until their stimuli pass over our neural pathways. The managers of an industrial enterprise may be fair and sympathetic toward the workmen; but, unless the fact has been registered in the nervous system of the workmen, they may misconstrue kindly acts of the management. Facts are facts in the physical and the chemical worlds, but they become facts in human relations only when they are a part of the nervous system and the mental world. A business man may say: "Why should I bother to explain my views and affairs to my employees?" "Why should I bother to find out what customers want when I know what is good for them?" "Why should I explain and convince my son that joy rides are an evil when I can compel him to remain at home?" Well, employees may work for a while, and some customers may buy, and son may remain at home physically and joy ride mentally; but, in the long run, the sooner the business man makes his message a part of the mental life of those whom he wishes to control, the sooner and the more completely can he influence them.

Ideas which give promise of success when analyzed in the office may be failures when used in the shop and retail stores, because too few persons happen to have those neural patterns. Shows that interest playwrights and actors may be failures when presented on Broadway. Styles that enthrall the artists may never impress those on the outside of the studio, and so for hundreds of other situations. The business man must recognize the well-known principle that, psychologically, facts are facts only when they have made

chemical changes in the nervous systems of others. To influence and control others, he must change the nervous systems of human beings.

The same principle applies to his own mental development. If he wishes to become an expert in his field, he must acquire those neural patterns that will enable him to cope with bigger problems. Fortunately, many kinds of impressions can be conducted over the nervous systems of all men. If they had been so conditioned by early experiences, many sales managers might have become equally competent as production engineers or as statesmen. Of course, we cannot take any man and change him over into another person, because we cannot erase all his old patterns and substitute new ones. But we can recondition or change the minds of our employees, customers, friends, and children far more than we realize. Each person can be put into contact with surroundings and stimuli that will give him some of the desired behavior patterns.

When the executive fails to influence an employee, or the salesman fails to sell a prospect, or the parent fails to control the child's behavior, each can ask himself: "Did I assume that the necessary neural patterns were there; or, if not, did I really try to put them there?" If the desired behavior is not produced, the executive who is doing the stimulating has not made the proper neural connections in the other fellow, or else he is trying to accomplish the physically impossible. We hear a great deal about the "you attitude." The neural pathways constitute the "you."

The integrative action of the nervous system.—Some years ago, in a farming section of Pennsylvania, a farmer and his wife went for a Sunday afternoon ride. An accident occurred and the wife's head was seriously injured. As a result of the accident she was unable to walk and lay in bed for two years. The farmer, of necessity, was forced to hire a housemaid to perform the work which would have been done by the wife had she been well. The first maid who was hired was rather old and unattractive. After a

time the first maid left and a new one was hired. The new maid happened to be younger and more attractive. One day the wife, as she lay in bed, became worried and suspicious of her husband's relations with the maid. She finally wrought herself up to so excited a state that she got out of bed, dressed herself, and walked downstairs to look for her husband. When he found her, she was walking almost as naturally as though she had never been in an accident. The neighbors often wondered whether the wife was malingering and had always been able to walk but had refused to do so. Some attributed the "cure" to the efficacy of prayer. It is probable, however, that the wife really was unable to walk after the accident; but, in the course of time, new "walking" neural patterns were formed, and, under the stress of a strong emotional stimulus, she discovered that she could walk. Instances have been recorded where cripples who appeared to be unable to walk for years found that they ran when scared by imminent dangers, such as fire or murder. Each year, the crippled and paralytic religious pilgrims visit shrines and receive "cures." Are these cures explainable on the basis of natural laws, just as a broken bone can be adjusted and allowed to knit as strong as ever?

Neurologists are certain that localization plays an important part in nervous action. In his book, "Brains of Rats and Men," C. J. Herrick shows that the human nervous system is similar to a complicated telephone system with local centers and exchanges. Two experimenters, Dr. S. I. Franz and Dr. Carl Spencer Lashley, have done some recent work in this field which indicates that human reactions are under the general supervision of the brain and that the nervous system acts as a unit rather than only in small parts. Doctor Franz taught animals to do certain tricks and then took out motor areas or parts of their brains. The animals were then unable to perform the tricks; but, when they were taught again, they recovered their ability. He also found that human beings who had lost the use of a

limb through accident or disease could be trained to use the limb again. Lashley has shown that it is possible to remove various parts of the rat's brain cortex and yet leave

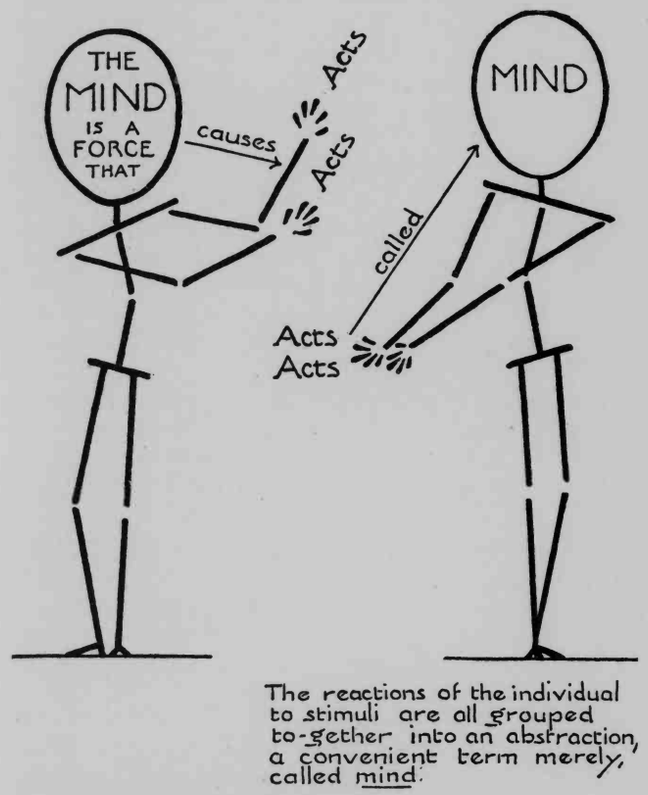


Fig. 6—A diagrammatic explanation of the term "mind." We no longer think of mind as a force, but use the word as a convenient term for all the organism's behavior or mental life.

the rat able to learn certain functions. If too large a part of the cortex is removed, the learning process is hindered. These experiments do not disprove the neural pathway

principle, but they do show that the nervous system acts as a unit; that human reactions are under general supervision; and that, when one part of the nervous system is destroyed, some other part may conduct the nerve currents effectively. Perhaps the system is similar to that of our hypothetical trapper who has worn his pathways over the hills to his traps. If a flood removes a part of a path or a landslide covers it, he can still get to his traps by making a new pathway.

By integrative action we mean that the nervous system acts as a unit rather than as an innumerable number of small parts. The nerve currents tend to be united into a complex whole or unit. The body responds as a whole to any situation. For this reason, psychologists do not like to think of "mind" as something separate from the body. Some scientists use the term "body-mind" or "psychosomatic functioning" to indicate the integrative action of the nervous system. We can now repeat that "mind" is not a power to be contrasted with the body. It is merely a convenient term, word, or abstraction, under which we group all the conscious and near conscious activities of living organisms. The same is true of terms such as memory, will, attention, intelligence, and imagination. They are convenient abstract terms for certain related mental activities.

The term "personality" is also used in the same manner. A personality is not merely a group of unrelated forms of conduct. A personality has integration of its parts or reaction patterns. It is a consistent working, acting, and reacting unit. Man's reactions are all obedient to natural laws. We can look upon him as a mechanism, but the mechanism always acts as an integrated whole and is an infinitely complex unit. Man is not a bundle of neural patterns, but an integrated mechanism which is so highly organized that some of his operations or activities are still subject to further investigation; but his behavior can be predicted and controlled under certain conditions and within certain limits. At any rate, the "mind" of man should be looked upon as obedient to natural laws.

Projects.

1. Ask 10 persons whether they admire salesmen. Then ask them whether they can recall any effects from the attitudes and responses of their mothers when salesmen called at their homes while they were children.

2. Think of some of your strongest likes and dislikes of persons or objects. Did you inherit these attitudes? Can you recall definite events that influenced your attitudes? How have these attitudes influenced your behavior?

3. Why do some people object to thinking of man as an animal or as a mechanism? What are the advantages and what the disadvantages of the business man's thinking of man as a mechanism?

4. Extroverts tend to associate with people of all types more than introverts do. In the Appendix you will find two sociability tests. One set of questions deals with facts and terms that are known to those who have many contacts with people of the lower social strata. The other set deals with those who associate with people of the more cultured classes. The tests do not have any time limitations. Test your knowledge of the questions.

5. Recall some of your past experiences that gave you a shock so severe that you now have definite emotions or feelings aroused whenever you think of those experiences. Can you overcome the unpleasant emotions by telling yourself that these emotions are merely the functionings of strong neural pathways and that your cortex (or you) can control the actions of those nerve cells?

6. Do neural pathways become fatigued? How may such fatigue be relieved?

7. Why can the old man recall the experiences that he had 70 years ago but not the events of to-day?

Chapter IV

Peculiar People Whom We Meet in Business

Classification of, and Physical Causes for, Peculiarities of People

Have you ever visited institutions for the mentally afflicted and observed the peculiar actions of the patients? Were they born that way or did they acquire their peculiarities after birth? The following four cases, very briefly described, indicate the probability that two of the four types of mild abnormality show the effects of heredity and the other two are the results of special, noninheritable, psychological influences.

Case 1.—Paul W. was a bright young man who taught English in a preparatory school. He really was a fine fellow, except for the fact that he had effeminate mannerisms. He walked with graceful short steps and his hands moved in the short smooth gestures of the sweet girl graduate. The boys claimed that he could sing soprano and nicknamed him "Priscilla." The students often wondered how he "got that way."

Case 2.—In a business office in Pittsburgh, the head of an important department was a competent executive in his job, except for the fact that he would fly into a rage on the slightest provocation. After each spasm of anger he would subside into a weakened physical condition for a day or two, until he recovered his usual mental powers. He tried to reform his temperament but could not. His anger was so strong an emotion that it seemed to wreck him physically.

Case 3.—In another office of the building worked an executive who also gave vent to his anger. When an employee came into his office to ask him a natural question, he would bang the desk and shout at the "awful stupidity" of the people with whom he had to work. When a salesman called, he took great delight in

trying to make the salesman feel "small." His associates never became friends, because he enjoyed "showing them up" and correcting their little deficiencies. His anger often appeared to be simulated rather than real.

Case 4.—Mr. Y. O. was thirty-eight years of age; had finished two years in high school; and was a bookkeeper by occupation. He stated that his advancement was retarded because he did not feel at home in the presence of others. He failed in several positions because he could not get along with the management. He said he could accomplish anything he wanted to, but he also said that he had never tried anything very difficult. He was married, but had no children. His married life was very unhappy. The following is quoted from a description of it. "I think that my bad humor and unhappiness have been caused by my wife. She constantly criticizes me. I never please her. She says that she loves me and will not leave me. She has had little education and believes what others tell her. So now I go about my work and give her her share of my salary. When I talk with somebody she thinks that I talk about her. If I do not talk; she thinks I am mad. My married life, in short, is hell on earth. I would be the happiest man in the world if I had a loving wife and a nice home. I have the nice home but not the loving wife."

In addition to these four examples, any experienced business executive could mention a number of employees or fellow executives whom he has classified as *queer, disturbers, misfits, sullen, negative, overconscientious, gossipy, roving, sexually perverted, oversuggestible, abnormal, mentally twisted,* etc. How did they become warped in personality and reactions? Were they born that way? Did they inherit their peculiarities as a part of their germ plasms or are they behaving in accordance with unfortunate associative linkages? The first two cases given above are explainable on the basis of their inherited physical make-up, their endocrine glands; but the latter two cases are more readily understood as acquired characteristics or simply the results of bad mental habits.

We have just learned that the body operates in a mechanical or natural manner. Every effect has a natural cause. The human bodily and mental activities are interdependent

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We have just learned that the body operates in a mechanical or natural manner. Every effect has a natural cause. The human bodily and mental activities are interdependent

and operate in a way that reminds one of the interrelated activities of modern business. The glandular, circulatory, and nervous systems are similar to the transportation system of a vast country. Trains, trolleys, buses, automobiles, trucks, bicycles, etc., are running hither and thither, carrying messages and conveying materials to needy parts of the body. The living body acts as an integrated whole. Just as business would suffer if any part of the transportation system were to break down, so the individual is seriously affected if the bodily equilibrium is disturbed. The chemical balance or the maintenance of the human organism is carried on through such parts as the blood and the *duct glands*—salivary, gastric, sweat, and sex glands; and the liver, pancreas, lachrymals, and kidneys. The mental balance, or the way in which the different adjustive factors are kept coöperating in a normal or a sane manner, is largely a result of the maintenance of systematic and sound habits.

The functioning of the nervous system is greatly affected by the *ductless glands*, which are now being studied, and which give evidence of pronounced importance in human behavior. The ductless glands are also called the *endocrine glands* and the *glands of internal secretion*. These glands do not have any ducts or channels for their secretions, but their manufactured products are taken up directly by the blood and lymph streams as they pass through the gland structures. The manufactured products are called *hormones* or *autocoid substances*. The derivative meaning of the word "hormone" is "to set in motion." In a general way, this term illustrates their function, for they seem to act as controls for all other parts of the body. They accelerate or inhibit the vital organs and vital activities and have an important influence on mental life. All these glands are organized into a complicated interlocking system and the action of one modifies, and is modified by, others. To understand why people behave as they do, it is necessary for the business man to have an acquaintance with the functions of the glands.

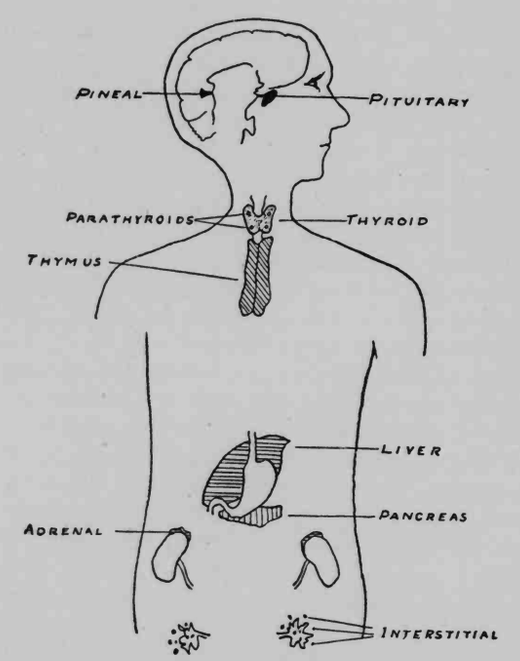

Fig. 7—Sketch to indicate the general locations of the principal endocrine glands. Adapted from Dashiell, John F.: "Fundamentals of Objective Psychology," Houghton Mifflin Co., 1928, p. 69.

The main endocrines are:

1. The thyroid.
2. The parathyroids.
3. The thymus.
4. The pineal body.
5. The pituitary.
6. The adrenals.
7. The gonads.

The thyroid gland.—In a certain valley in Switzerland, a large part of the population are cretins, the Tom Thumbs of the modern circuses and moving pictures. They are decidedly stunted in height and have a protruding abdomen. The skin is dry, scaly, and wrinkled. The hair is dry, coarse, and brittle. The tongue is thick. The head is short and broad. The facial expression is apathetic. The memory is weak and the thinking is slow. Until thirty-five years ago, cretinism was regarded as incurable; but science has found that, by feeding the child a pellet of thyroid gland extract from sheep, or the synthetic product, it is possible for him to attain to normal physical and mental development. The feeding, however, must be continued in adulthood to maintain the normal mental state. About 60 per cent of the thyroid secretion is iodine.

The thyroid gland consists of two masses of cells, one on each side of the windpipe and close to the larynx. The hormones of the thyroid act as a catalyzer, or a substance that produces chemical change without being chemically changed itself. Its function is important in the process of metabolism or the transformation of food into energy. If the thyroid is deficient in action, the body is soon clogged with waste products from kidneys, skin, and lungs. The activity of the thyroid can be measured by the *metabolic index*, which is found by measuring the amount of carbon dioxide in the expired air and then dividing that variable by the body weight.

In cases of underfunctioning of the thyroid, or *hypothyroidism*, the disease called *myxedema* develops. The gland may increase in size in order to increase the supply of thyroxin, a condition commonly termed "goiter." The largest goiter that the writer has ever seen was that of a woman who had given birth to twenty-two children. In this case, the gland probably increased in size in order to supply the necessary amount of secretion for the embryos and the mother. In hypothyroidism the individual is slow, dull, indifferent, and clumsy. In the interior of the United

States, where there is little iodine in air or water, some of the municipalities supply iodine in the water system to prevent goiters among children. The number of cases of goiter is much smaller near the seacoasts, where there is more iodine in the air and where people eat more sea food. The best preventive of goiter in children is the taking of iodine by the pregnant mother, under the direction of a physician. Some parents think that they can prevent goiter in children by the use of iodized salt in the cooking of foods. This method is questionable, because some members of the family may already have too much iodine in their systems and they may develop exophthalmic goiters. Iodine should be administered in tablet form to those individuals who need it, under the direction of a competent physician. In some cases of mental retardation of school children or the definitely feeble-minded, the administration of thyroid has wrought dramatic changes in body and mind; but it has not been effective in every case which has been diagnosed as myxedema.

When the thyroid is overactive the whole organism speeds up. The pulse is rapid, the skin is flushed, and the temperature is above normal. The individual is high strung, excitable, irritable, and unable to relax or to sleep. Fear, anger, and hysterical joy are easily aroused. The individual is thin, regardless of the amount of food that he eats. The bodily reserves of energy are readily exhausted. In extreme cases the individual is filled with fear and apprehension. He may have hallucinations of hearing and vision. The voices usually say disagreeable things. When the patient reaches this stage the prognosis is bad. He usually dies.

Hyperthyroidism seems to be more prevalent in times of war or of mental stress. Several cases have been reported where a business executive was too irritable to get along with his associates and the endocrinologist removed a part of the thyroid gland or cut off some of its blood supply. When the operation was completed, it usually resulted in a

more calm and normal emotional temperament and enabled the executive to perform his job in an efficient manner.

The parathyroids.—These glands are four in number and are located on the thyroids, although they have nothing to do with the thyroids. They seem to control the lime supply and calcium metabolism. For this reason, they are important in maintaining the acid base equilibrium and in the healing of bone fractures. When they are removed, the organism becomes exceedingly excitable. It may even be so jumpy as to go into convulsions. In some cases, where human beings suffered from pronounced nervousness, insomnia, and tremors, the parathyroids were defective or diseased. When they are removed or diseased, pronounced changes in behavior take place. It is certain that the lime supply is important, not only for the normal condition of blood and bones but also for the nervous system. Science has now produced a synthetic secretion that aids the functioning of the parathyroids, although its use is still limited to the few specialists who have given emphasis to the study of the endocrines.

The thymus.—This gland is located on the windpipe and is called the "gland of childhood," because it influences the early physical and mental development. It is largest during the suckling period and then atrophies. Its hormone holds in check the development of the sex glands and those physical characteristics that go with the development of sex, such as hair on the body. It is probably very important in giantism and in those abnormalities where children five years of age are sexually adult. It is related to the gonads in function.

The pineal body.—This gland lies in the medial plane and at the base of the brain. It is called the "gland of adolescence." The pineal body has a glandular structure during childhood, but this is lost during puberty. It is considered important in the development of the brain and the sex organs.

The pituitary bodies.—The pituitary gland (hypophysis)

consists of two bodies or lobes—an anterior and a posterior lobe. They are located at the base of the brain in the center of the head. The whole gland is the size of a pea and until recently it was supposed to be vestigial. It is structurally connected with the brain, but does not take part in brain action. Its removal causes death within three days.

The anterior lobe controls the growth of the skeleton. If overactive in childhood, it causes *elephantism* or *giantism*, which is seen in the giants of the circus. If the overactivity takes place after childhood, the bones of the limbs and those of height do not become greater in length, but the facial characteristics change to those of the *acromegalic*. The nose and chin are prominent, the head is broad, the features are rugged, and the face has the appearance of the gorilla. The individual is mentally alert, and, as a result of his keen wit, has been pictured as the court jester. If the anterior lobe is underactive in childhood, the adult tends toward infantilism or babylike bodily proportions with a childlike, happy-go-lucky disposition.

The posterior lobe secretes a hormone that affects the tonus of the smooth muscles and the blood vessels. The heart beat is decreased, the blood pressure is increased, and the contractions of the intestines and uterus are increased. That is why pituitrin is used for the uterine muscles during childbirth.

In hyperpituitarism the individual is active, irritable, and suspicious of others. In hypopituitarism he is slow and ambitionless.

The adrenals.—Adrenals (suprarenals) are located near the kidneys, but have nothing to do with the kidneys in function. They are called "the glands of war," because they are active in times of emotional stress, such as in fighting and fear. They are made up of two distinct parts—the medulla and the cortex, each having separate functions.

The adrenal cortex is called the "organ of masculinity," because, if it is deficient in a man, he tends to be effeminate, with the gestures, voice, and mode of walking of a woman.

If it is hyperactive in a woman, she has masculine traits—hair on the lips and a deep voice. The bearded lady of the circus is the result of the overfunctioning of this gland.

The secretion of the medulla is made synthetically and is called "adrenalin" or "epinephrin." When the medulla pours its secretion into the blood stream, the individual is prepared for combat. The digestive processes stop, the sweat glands open for action, the blood vessels are prepared for a larger flow of blood, the liver discharges a large amount of reserve blood and releases sugar for bodily combustion, the respiratory process is hastened, and the blood clots more readily. All these and other results have been studied by the scientists in their researches of the emotions of fear and anger. When the individual is thus stimulated, he can run faster and hit harder. That is why we respect the man whose anger is aroused far more than the one who is in a quiescent state.

The gonads.—The gonads (testicles and *interstitial cells* of male and ovaries and *corpus luteum* of female) are called sex glands; but this does not mean that they produce only the ova and the spermatozoa, which take part in the process of fertilization, for they are also important in the development of the secondary sex characteristics which distinguish male and female. This refers to the differences in distribution of hair on the body, the coarseness of the beard, the mammary glands, and voice, height, and weight.

The gonads and sex glands have been given a great deal of publicity in the Sunday newspaper supplements, because some of the scientists have performed experiments on the changing of the sex of birds by the transplanting of testes and ovaries from one sex to the other. Where this has been done in the laboratory, the results have been remarkable, in that the fowl took the secondary sex characteristics of the sex to which the transplanted organ belonged. This does not suggest, however, that the sex of humans can be controlled before or after birth. Nor can the fountain of youth be found by way of the gland route. As previously

stated, the whole human being is an integrated mechanism, and it is not possible to have a new or rejuvenated machine by replacing one old part with a new part.

The endocrine glands of the body operate as a vast and complex system. They act as an integrated unit in conjunction with the blood stream. We can realize how their secretions may be carried to all parts of the human body and unlock the organ for which the hormones have been adjusted when we recall the fact that the blood makes a complete trip around the body in the short period of from twenty to thirty seconds. This means that the blood stream makes about three thousand round trips in the course of each day. The hormones are thus carried to the specific organs which they stimulate or inhibit and thus maintain the equilibrium of body and mind. Small wonder, then, that disturbances of the endocrine system will modify human behavior and tend to make us physically or mentally unbalanced. In the hospitals, where certain forms of endocrine abnormality are studied, the specialists administer secretions of several glands rather than the secretion of only one gland. The various types of subnormality and abnormality are classified on the basis of the endocrines, but it is of little help to us to classify normal persons according to a glandular classification. Normal persons do not vary enough to enable us to be certain of our cataloguing. However, we can make rough general classifications, such as hyperthyroid, hypothyroid; hyperpituitary, hypopituitary; and overactivity or underactivity of the cortex of the adrenals. At any rate, the business man should know the physical bases of the mental balance, and he may anticipate valuable results from endocrine study by the scientists.

Psychopathological conditions classified.—Some doctors estimate that 80 per cent of their patients are *organically* sound but *functionally* ill. This means that the physical machine is in good condition, but is not operating satisfactorily or normally. When the doctors make careful tests

of the patient's body, they are unable to produce any evidence of impairment of the tissues. In terms of a business, there are plenty of resources, but the management seems inefficient. We may classify human illnesses into several groups:

A. **Organic.**—The tissues or "machine parts" have been impaired. So far as insanity is concerned, approximately 42 per cent of the cases are caused by organic conditions. These include general paralysis (syphilis), which contributes about 10 per cent of all insane cases; and diseases of the brain, such as tumors, arteriosclerosis, senile decay, et al., which contribute about 16 per cent of the cases of insanity.
   1. *Traumatic.*—Mechanical injuries or wounds, as broken bones or cuts.
   2. *Toxic.*—Poisons in the body, as alcohol or drugs.
   3. *Bacterial.*—Germ infections or diseases, as smallpox, typhoid fever, or colds.
   4. *Glandular.*—These diseases have been discussed in this chapter.

B. **Functional.**—These ailments might be called "managerial" or psychological. Fifty-eight per cent of all insane cases appear to be of functional origin and cause.
   1. *Psychoses.*—Pronounced mental disturbances, which unfit the individual for adjustment to his usual environment—paranoia, dementia præcox, manic-depressive psychoses, et al. These ailments require institutional treatment.
   2. *Neuroses.*—Nervous disorders without lesion of parts, as neuralgia and epilepsy.
   3. *Psychoneuroses.*—Mild mental disturbances, which do not wholly unfit the individual for his usual environment. Functional dissociations of the personality which result in
      a. Neurasthenia.
      b. Psychasthenia.
      c. Hysteria.
   4. *Psychopathic adjustments* to reality which are found in "normal" persons in business such as
      a. *Compensatory mechanisms.*—"If I can't be a big business man, I can be big in some side line."
      b. *Conquering hero mechanism.*—"Just watch me. I'm going to beat Henry Ford."

      c. *The suffering hero mechanism.*—"Just note the fact that I am superior to you because I have more hard luck."
      d. *Identification.*—"I'm a new kind of Henry Ford."
      e. *Fixed ideas.*—"You must do it my way."
      f. *Negativism.*—"Whatever is is wrong."
      g. *Regression.*—"If I can't be a big business man, I can daydream of a former happy state."
      h. *Œdipus complex.*—"If I can't succeed in business, mother will love me."
      i. *Projection.*—"It's the other fellow's fault."
      j. *Introjection.*—"I'm satisfied where I am."
      k. *Phobias.*—"I'm afraid."
      l. *Invalidism.*—"I'm too sick to do much."
      m. *Habit spasms.*—"If people won't notice me, I'll make them notice my twitches."
      n. *Sexual anomalies,* such as homosexuality, masturbation, sadism, masochism, and exhibitionism.

Dean Winternitz of the Yale School of Medicine said:

There are to-day more hospital beds in this country occupied by the mentally disordered than by the physically ill, and the number of patients in institutions for mental diseases and feeble-mindedness is increasing. The suicide and homicide rate is tending upward. Divorce is increasing. Crime is rampant. Does it not mean that sociologists, economists, psychologists, psychiatrists and physicians must work together if our physical health and our material wealth are to mean anything in terms of human happiness?[1]

The business executive need not concern himself with the organic ailments—the severe breakdowns of the human machinery; nor with the neuroses and psychoses—the severe cases of mismanagement. The physician and psychiatrist must deal with these. In a hurried treatment of this type we must delegate cases which require hospital or institutional treatment to experts who specialize in those problems. Every executive does, however, have frequent contacts with the psychoneuroses and psychopathic adjustments. At times, every person exhibits symptoms of

[1] *Mental Hygiene Bulletin,* March, 1929. The National Committee for Mental Hygiene, 370 Seventh Avenue, New York City.

abnormality, in a mild or a pronounced degree, as 100 per cent management is not common to individuals any more than it is to businesses.

The Psychoneuroses

Some experts classify the psychoneuroses with the organic ailments. They do carry many physical symptoms, such as headache, backache, hot and cold flashes, indigestion, constipation, and dysmenorrhea. The extent to which these bodily symptoms are cause, or effect, or mere accompaniments of psychoneurotic conditions is unknown. However, we shall describe them for the benefit of the business man, in order that he may be able to recognize them when he finds himself, his employees, or his friends having the characteristic reaction patterns.

Neurasthenia.—Neurasthenia means *asthenia*, or exhaustion, of the nerves. It is often synonymous with nervous exhaustion and nervous breakdown. However, it is really not so much an exhaustion of nerve energy as a case of misplaced energy. It is more common among women than among men. The main symptom is chronic bodily and mental fatigue. Accompanying the fatigue are irritability, inability to concentrate attention on any one task, bad temper, moodiness, self-analysis, and self-pity. Occasionally, the patient exhibits pronounced exhilaration, but this is soon followed by fatigue and irritability. *Hypochondria*, or excessive attention to the functioning of the bodily organs with continued functional pains, is quite common. As soon as the doctor shows the neurasthenic that she cannot have that kind of pain where she has located it, she then claims that the pain has moved to some other part of the body. The more attention the pain receives the worse it becomes. For this reason, it is well to keep medical books in the physician's office and the public library. They should not be in most homes. If the housewife is tempted to buy medical books, let her buy, instead, a book on how to make money at home or how to rear her children.

The neurasthenic wife or husband is the kind of spouse who keeps her or his mate busy propping up a partner who always insists upon being hard to live with. The neurasthenic mate is a true psychological "ball and chain." Small wonder that some of the marital partners obtain divorces on the basis of incompatibility of temperament!

What are the causes? Some men attribute it to heredity, but it is generally considered to be due very largely to an inability to face reality. It is an evasional device. It may be accentuated by bad habits, such as late hours, sexual vice, and alcoholism. The endocrine glands may be a factor in the psychoneurosis, but that has not been demonstrated as yet. The strenuous life of the present age is supposed to be a responsible cause for many cases. This is hardly correct. When we study the modes of living of previous ages, we find that the peoples of those days also had their strenuous times. Our pilgrim forefathers certainly had as many difficulties as we have. In fact, they probably had more. If we had to make sure that no lurking Indian was waiting to shoot an arrow at us every time we left the home, we should have enough stimulation to keep our minds on external situations rather than on our own subjective states. The stress of modern life lies in the fact that we do not have enough important things to do. This applies particularly to the women of the middle and upper classes. Labor-saving devices have eliminated most of the hard but beneficial labor of the American home. In addition to finding themselves more or less useless, women have a kind of indefinable, unfulfilled longing to be something or to do something worth while. Many are out of the general scheme of things except as spectators or as they manufacture something to do. The most interesting device to help woman to escape neurasthenia and to make herself a part of the scheme of things is to "take up a cause." She hears that the working girls are making only ten dollars a week and she starts a home for them; or she finds that dogs do not have homes, so she starts a home for homeless dogs.

Some of these "causes" are quite worthy and legitimate, but they are not a natural part of the lives of most women. As the term expresses it, "the cause is taken up." Attaching one's self to a cause is vastly better, however, than seeking relief in a continuous round of social pleasures. When a woman has a nervous breakdown, because she has dashed from one meeting to the next meeting, then to a show, and then to a dance and supper at breakfast time, the breakdown is really caused by the mental factors that caused her to dash around in circles. The rushing around to functions is merely the expression of a lack of adjustment to life, and the breakdown is just a kind of end reaction. When effort is merely effort and not a part of a unified plan of living, then the effort becomes fatiguing and unsatisfying. The individual is irritable and moody. Life is futile.

What are the remedies? The usual method is to take a rest cure at home or in a sanatorium. A rest cure of the right kind—a cure that builds up the mind as well as the body—is desirable. However, many cures are more harmful than beneficial for neurasthenics. If the patient merely goes some place and sits down and does nothing, she is not helped to build a new philosophy of life that will revitalize her. The tonic and rest are helpful only in so far as the condition may be accentuated by a rundown physical state.

If the attention is directed to the bodily organs or functions, harm is done. Sensations of pain and discomfort are soon established, even though the organic state is perfect. Detailed care of the diet simply makes the digestion worse. The physician's questions regarding symptoms are interpreted to mean that the symptoms are present and suggestibility runs wild. Pains and aches should be minimized by friends and associates, and the patient should be given mental pictures of health and strength rather than pity and sympathy. Make her feel that she is missing more fun by illness than by health. Social contacts should be with those of dynamic positive personalities. The mental imagery should be of a very positive sort. Autosuggestion is of value,

if the patient can be trained to apply it with complete belief. If she can do so with conviction, it is well for her to renew her interest in some religion and to acquire a philosophy of her own.

The real problem is that of getting the patient to live outside herself rather than within her own feelings. She must be given absorbing and satisfying work that fits into some plausible scheme for her own philosophy of life. Work of the right kind is the main help. Phychoanalysis is the best route to attain this end of a healthy outlook; but the whole scheme of treatment is more easily applied on paper than to the patient. Most of these patients are not bad enough for us to spend much time and effort on them and so they are neglected and allowed to grow worse. Neurasthenia is exceedingly difficult to relieve for any great length of time and it is much harder to cure. One thing that the business man must bear in mind is that his son and daughter should be required to work at some steady occupation which is worth while to society and to the individual. We shall have more women going into business or some other kind of work. If business will not accept them, then we must expect to have more neurasthenic wives and daughters and to supply institutions and "causes" to take care of them.

Psychasthenia.—Some medical men classify psychasthenia under the heading of neurasthenia, but it has certain differences which should be noted. Neurasthenia is characterized by an exhaustion of the bodily mechanisms, whereas psychasthenia is an exhaustion which follows mental work. The symptoms are obsessions, manias, impulsions, and phobias. The individual may have a strong impulse to set fire to his home, to steal money, or to kill his wife. Some of the psychasthenics wonder whether they are alive and whether they are really themselves. Sometimes the world seems to be closing in about them and crushing them. They know that their fears and impulses are without any real basis, but still they continue to fight them. We

are not concerned here with the true or completely psychasthenic patient, but rather with the psychasthenic tendencies that are found among the members of the office, the shop, and the home.

The most common tendency of this type is worry. In general, we consider worry an unpleasant mental state, and yet, like any other habit that is continued, it may become agreeable in its own way. A worry may hide a symbolic wish, as does the excessive worry regarding the health of a wealthy uncle whose money we shall inherit, but we never discuss the wish with ourselves. A boy worries about the welfare of his mother when she goes away from home. Inasmuch as she has kept him tied to her apron string, he experiences a sense of relief and may secretly hope that the train will be wrecked in order that he may be completely free. A mother sends her children out to play, and, when they do not come home at the usual time, she worries; partly because of the fact that some neighbor's child was lost or killed, but also because she will have a greater thrill when the children do come back. In this case the worry is a kind of thrill or a preparation for a thrill. It relieves the monotony of housework. Then, too, some of the habit patterns are becoming restless, just as the smoker finds himself restless when he is unable to have his customary cigar. The mother is so accustomed to scolding and caring for the children that she misses them for that reason. It is a kind of mental random movement which can be made for the solution of the problem when physical action is impossible.

Temporary worry is not so great a problem as the persistent apprehensive variety of worry regarding one's financial status, health, or studies. In many cases, there is just cause for worry on these subjects, but the psychasthenic does nothing about it. If a student is failing in his studies, he should not worry about it but get to work. If a person worries about his health, the answer is to have a thorough physical examination and then, if the worry is unjustified, stop it. But here comes the difficulty. When

the chronic worrier is told all about the fact that he has no real reason to worry, he still continues to worry. For this reason, it it well to ask the expert in worry whether he really wants to stop worrying. Even if he answers, "Of course I do," he must have the idea emphasized most strongly that he must really want to stop worrying before anything can be done for him. He must determine to picture in his mind positive, healthful, pleasant images rather than the expected unpleasant imagery.

Stage fright is a mild form of psychasthenia. Why should any one be fearful when he speaks before others? If he has nothing worth saying, he can simply say that and sit down; but if he has a message of any importance, he ought to be glad to give it to his fellows. Of course, the talk in public puts one in a position where the ego is liable to be assailed. The speaker knows that some members of the audience may know more of the subject than he does and he fears their disapproval. This can be overcome by the speaker's frank acknowledgment that he is presenting merely his own experiences or views and that he would like others there to tell him wherein he is wrong. This does not mean that the speaker who is called upon for a five-minute report or discussion should then spend a half hour in making apologies. Nor need his talk begin with an apology. But his attitude should be that of the student and learner rather than that of the polished expert. In fact, very many of our psychological difficulties, particularly our self-conscious feelings and fears, would vanish if we could only get ourselves into the mental state of the true student. The true student seeks truth and the facts. Whatever his searches may uncover, it will not jeopardize his ego, because his ego is not involved. The scientist is just as greatly interested in finding the things that fail as he is in finding the things that succeed, because he wants to know all aspects of the problem—not merely those that give him fame or money.

If the speaker makes up his mind that speaking in public

is an opportunity for him to help his fellows and at the same time an opportunity to learn more than he can give, he will have little trouble in speaking anywhere, unless he has had a very serious shock while speaking in public. If he has had a decidedly unpleasant experience while speaking in public, then he will have to regain his ease of speaking by gradual steps. He must begin on small and sympathetic audiences. He should practice on people who know much less than he does of the subject he talks about. He must get away from the idea that he is competing with any one. He is just going to tell what he knows as clearly and as well as he can and thereby he hopes to learn more himself.

A common psychasthenic tendency is the *abulic obsession.* This term is applied to the inability to get started on the job that awaits our action. We have a report to prepare or a call to make. We often find ourselves postponing it and procrastinating until we are embarrassed to do it. This is one reason why operating a business according to a definite schedule is better than trusting to the self-starting of the employee. A large part of the executive's work consists of setting schedules for his associates and then seeing that the schedules are followed. But even the executive who schedules the work of others often finds himself unable to do the things that he wants to do but somehow never gets done. The answer is to make a schedule for his annoying hang-over tasks. The business man should set a definite date when a task is to be completed, and then at once start a small part of the task. He should not plan to complete the whole job or a large part of it at one sitting, but should make the outline, and then he will find that he can continue for a reasonable length of time.

Another help is "whenpecking." By this is meant the enlisting of the coöperation of one's wife, mother, or secretary. The business man can tell her that he wants to finish a task by a certain date and she is requested to jog his memory occasionally. Some evening when he may have made up his mind to go to a stag party, his wife will

say: "*When* are you going to finish that fourth lesson in business management?" He may be more or less offended at the insinuation, but he will know that she is right and probably will get busy on the more important task. To neglect to do what a person knows he ought to do will necessitate an evasion that he cannot endure.

When definite and irrational psychasthenic tendencies are persistent, such as the phobia, compulsion neurosis, impulses to say indecent words in public, and the desire to kill some person who is loved and admired, then it is well to consult the psychiatrist. These impulses are symbolic of patterns which have been connected with the adjustment of the individual to some unrecognizable and inadmissible impulse, such as the sex impulse.

Hysteria.—The term "hysteria" is used in many different ways by the psychiatrists, but it is often used in the sense of those intense emotional states that come and go without apparent cause. An example is that of a housewife who, while busily engaged in her housework, such as sweeping the kitchen floor, suddenly breaks forth into a fit of intense weeping. She may cry bitterly for a few minutes and then pick up her broom and resume her work. When she is asked why she cried she says that she did not cry. She is unable to recall the incident. In many cases the individual also acquires a paralysis or an area of anesthesia, or she may be in a state of mental stupor and have strong delusions.

Hysteria is a mental disorder which is characterized by mental dissociation. It often causes pronounced disturbances in bodily and mental activity and may result in illnesses such as hysterical blindness, as in the case reported by Janet: [2]

A man, thirty-eight years of age, was cleaning a machine. A rag full of grease and petroleum caught in a gear and lashed him on the face. The face was only dirtied, and he did not trouble about the accident. He washed himself, but he had much dif-

[2] Janet, Pierre: "The Major Symptoms of Hysteria," p. 186. The Macmillan Co., 1920.

ficulty in cleaning his skin and eyelids of these fatty substances. He said that nothing penetrated into his eyes and that he felt no pain in them. However, after an hour, he seemed to see as it were a mist before him; this mist grew thicker and two hours later he could no longer see at all. His vision fluctuated a little on the morrow and the following days. From time to time he could see a little, chiefly with his right eye. These fluctuations lasted for a month, they then disappeared absolutely and for four years he remained quite blind.

In hysteria the patient seems to acquire his functional ailment as an accompaniment of some emotional outburst. In the ordinary case of invalidism, the patient acquires the chronic ailing more slowly. Invalidism is more common among intelligent persons. Hysteria is more common among children and adults of low intelligence than among persons of high intelligence. The hysteria patients have a tendency toward simulation and delusions. Many of them have falsely accused those whom they love. Children have caused their parents to be brought into court, because they claimed that their parents had locked them in the attic or the cellar and had given them no food for days at a time.

The chief suggestion for all of us is the fact that disease may be truly organic or it may be functional. If it is functional, it is just as serious as if it were organic, but it must be dealt with along psychoanalytical lines which will be discussed in the next chapter.

Projects.

1. Think of several peculiar persons whom you know well. Can you determine whether the main causes of their abnormal behavior are of physical or psychological origin?

2. Think of a married couple who are not living together very compatibly. What are the causes of their incompatibility? Are both abnormal psychologically? Would either be able to live happily with a mate of a different type?

3. Discuss possible ways in which the discontented, semi-idle housewife can make life more interesting for herself. What could

the husband do to assist the wife in achieving a satisfied mental state?

4. Assume that a neurasthenic relative must be sent away for a rest cure. What kind of an institution would you seek to locate for the patient?

CHAPTER V

How People Evade Their Problems

Their Psychopathic Adjustments

Dr. Alfred Adler has made many studies of persons who are mildly or decidedly abnormal and has given us a general principle for interpreting the mental life of the individual. Every person has the desire and the will to be superior in one or several respects. Each man wants to be worth while in his estimation of himself. If the individual cannot meet his obstacles in a positive and normal manner, he will do so in an indirect manner, or he will compensate for the deficiency. Inferiority cannot be endured. Superiority must be achieved at any cost; or, at least, a sense of superiority to the individual. A sense of guilt or shame is unendurable.

The psychopath and every normal person with psychopathic tendencies runs away from his problems or his realities. If he cannot react favorably to difficulties, he may compensate for them by doing something else which will satisfy the tendency. He may evade the difficulty by illness, as in invalidism. If he does not like his work, he may even develop aches and pains, in order to stay at home; or he may project his difficulties to another person by imagining "the boss has it in for" him, or he may become completely submissive to the situation; or he may take refuge in neurasthenia, psychasthenia, or hysteria. As C. K. Ogden [1] has expressed it:

> We are beginning to realize with the aid of the doctor, that our neuralgia, our headache, our migraine, our dyspepsia, and even our phthisis are, no less than the phobias, the hysterias, the anxieties, and the other neuroses which loom so large in the contemporary social picture, as often as not, ways in which we are dodging some awkward situation or decision. We have been evading the issue. We have lost touch with reality. And again, just as we evade the personal problem, so civilization as a whole is evading the cosmic issue. Vaguely apprehensive that the old solutions in their traditional form can no longer be squared with the facts, we turn wistfully backwards or compromise with some morbific phantom which we conjure up to screen us from the abyss. But we must dare to be wise, and the way to wisdom lies through knowledge of ourselves.

[1] Ogden, C. K.: "Meaning of Psychology," p. 312, Harper and Brothers, 1926.

Compensatory mechanisms.—The insurance of the ego of the individual is accomplished through *substitute activities* or *compensations.* Sometimes we also speak of these adjustments as *defense mechanisms* or *rationalizations.*

Why does one man go into the field of selling and another into production or banking? Is it simply a matter of chance? Is it just a matter of training? In some cases it is the natural result of training, as when the father tells his son about the money to be made in the legal profession and then has the son talk with some enthusiastic lawyer who convinces the lad that it is the most honorable and remunerative profession. Law, as a vocation, becomes associated with other desirable neural bonds of prestige, fame, and wealth. However, it is probable that many of the vocations we select are chosen as an avenue of expression for thwarted tendencies. If a boy is a poor athlete, he may take refuge in his books. If he cannot be worth while as a physical specimen, he may become important as a mental worker, and, eventually, he may become a college professor, a scientist, a statistician, or an accountant.

In the psychological clinics we find cases where a rather quiet and well-behaved man suddenly strikes strange women whom he meets on the street. He may be walking along in an apparently calm manner, but every time he passes a woman he has an impulse to strike her or push her off the sidewalk. When he is analyzed we find that his mar-

ried life is rather unhappy. His wife is mean in many petty little ways. His life is miserable because of her constant nagging. And yet, he must withhold his impulses to talk back to her because, if he lets go, she goes into hysterics. He finally damns all women, and, when he goes on the street, all women are symbolic of thorny nagging. He has an irresistible impulse to strike them. If he adjusts himself to the situation by forgiving his wife, or feeling sorry for her mental state, or overlooking the nagging, then we consider him normal. But he can also attain adjustment of himself in a socially acceptable manner by going into a business, such as the millinery business, where he meets many women and can have the pleasure of selling them a dollar hat for ten dollars. Every time he overcharges a woman for a hat he gets the same kind of satisfaction that he would if he could beat up his wife for her "cussedness." Note the difference in our social estimate of the henpecked husband. In one case he would be considered a criminal and in the other he would be a successful and respected business man.

A young man goes into selling, and, though he succeeds, he must do something else, because his friends regard salesmanship as Babbitty and he feels inferior as a salesman. Hence, he wishes he were an artist or something more respected by his friends. The real causes of labor turnover are to be found in these hidden strivings wherein the individuals try to avoid emotionally unbalanced states. The employees are trying to find a form of self-expression whereby they may escape their feelings of inferiority and appear superior in their self-estimates. The job or experience that causes one man to feel superior may cause another to feel inferior. A man's reactions to a job depend upon how he is attempting to adjust his inner mental life rather than upon the job.

The compensatory mechanism is readily understood when we recall the employee who is meek in the office but a tyrant at home. Another good example is one who, being little in stature or of low position, assumes a haughty air,

a cold gaze, a pompous manner, or a loud voice. A woman who feels inferior may ape the cultured or the rich and attend functions for which she does not care or lectures that she does not understand. Attendance at the opera is imperative for her, because it puts one into the desired class of those who are admired.

Alcoholism, too, is an escape mechanism or a substitute activity. It is doubtful whether any man would ever drink to excess if he were well adjusted to his reality. Drinking is a symptom of the psychopath. When we watch the typical boozer, he does not drink for the taste of the drink, but because he is bored, restless, or unable to meet some emotional problem. If we exclude the man who is made intoxicated by his friends for the carrying out of a jest, we can attribute other forms of excessive drinking to a failure of adjustment to reality.

Compensations or substitute activities may be harmful or useless, or they may be of great value to the individual and to society. The man who goes into the business world and finds that he is not a good business man and that he cannot attain self-worthwhileness can substitute for that attainment a steady attack on the whisky bottle, or he can go into church work and fraternal activities, or he can write books. The normal individual takes an interest in his community, his home, and other factors of good citizenship; but, if he remains in business and makes his outside activities a heavy sideline, he shows that he is not really adjusted to his job. He is seeking compensation for some lack that he feels in his personality. It is usually well, therefore, that the general manager should frown upon outside activities of a negative or a positive sort, if those activities absorb very much time without bringing better adjustments to the man's job.

The hero mechanisms.—In the *conquering hero* mechanism, the individual cannot successfully face his situations in direct attacks, but he can escape by means of the daydream. The boy who is thwarted in his attempts to do as

he pleases at home can soar away in his imagination to wonderful lands of cannibals and kings, where he can conquer armies and achieve honor. As he becomes older, he daydreams of financial success, where he will have several large automobiles, a magnificent estate, a yacht, plenty of money, and then, to cap the climax, he will become a member of the board of education and fire all the teachers whom he does not like. On other days he may picture himself as a great prize fighter, a football player, a bandit, or a preacher. The girl also daydreams of the social approval of others about her, where she is a great singer, a social worker, a missionary, or a Joan of Arc.

A certain amount of daydreaming is normal and natural for all humans; but, when it becomes a substitute for reality, it eliminates the necessity of actual achievement and causes the individual to live in a world of phantasy. In hospitals for the mentally ill, we find patients who are satisfied to live within their imaginations. Some of them imagine they are great men and women, such as Napoleon or Queen Victoria. As Kipling said, if one can dream and not make dreams his master, he is a successful man.

The *suffering hero* type of escape is also common, as in the small boy who, because he is reprimanded, decides that he will be a real bad bandit and rob trains, be put in jail, and eventually be hanged. His body will be brought home and all his parents, relatives, friends, and teachers will be sorry that they mistreated him. This type of behavior is expressed in a milder form by the child who pouts, pities himself, or refuses to eat. When children become sullen we should pay no attention to them. If they refuse to eat, do not urge them to do so, for, the more attention they get, the more pleasure they secure in their imaginary heroics. The stenographer who becomes peevish and sullen can be stimulated in several different ways. Her supervisor may approach the issue in a direct frontal attack and tell her to "snap out of it" because she is making the day unpleasant for every one around her, or he may spend ten minutes in

talking to her and analyzing the situation, or he may give her so much work to do and demand it so soon that she simply will not have time to think about herself. However, a very sensitive girl may be paralyzed by a severe scolding. It is well, therefore, to treat each employee as an individual rather than as one of a class. One rule should govern the executive—that is, the employees must be trained to deal with situations as they are rather than as they would prefer them to be. An executive's employees may apparently be busy at their tasks, but their minds may be occupied with curses for the boss and wishes that they were a thousand miles away from him and his picayune job. On the whole, imaginary achievements are better for the employee and the company than imaginary grievances.

In *identification*, the substitution for desired action is brought about by the individual's identifying himself with some definite hero or character. When people go to the moving picture show and throw themselves into the emotionality of the plot, they identify themselves with the hero or the heroine and fight the villian. The reason why we do not care to see moving pictures or plays that describe life in its daily routine is that we want to escape our own realities and live in a new world rather than in the kind we have each day. Those of us who are in routine jobs want to identify ourselves with the young man who was reared in the country but went to the city and there beat the captains of finance at their own game. We want to see beautiful women on the stage and women who are never troubled by the boresome problems of taking care of crying babies and mending socks. We want the ideal pictured in our dramatizations of escape from our problems. The happy ending is the only satisfying one, because we identify ourselves with the character who symbolizes the answer to our own emotional needs. Identification also means that we should write and illustrate our advertisements in such a way as to show the most ideal people and surroundings. To sell kitchen cabinets and bathroom fixtures we should

show them, not in homes of our regular customers, but in the home of an ultra-social individual or as pictured by the artist in a happy dreamland.

In some industries, the lesser executives do not work for the company but for the key executive. They come with him when he takes charge and go with him when he leaves. Their identifications are for their admired individual and not for the company. This is one way in which factions develop within an organization. Such a psychological condition is not wholly bad, because the employees work happily and industriously for their hero. So long as the hero remains a great and productive business man there should be little objection from the stockholders. It is a legitimate form of disloyalty.

Fixed ideas.—Every business man has met examples of the employee who was reprimanded for some slight infraction of the rules and who brooded over the reprimand for months—his feelings being wholly out of proportion to the seriousness of the affair; or the employee who had to be discharged, and who returned again and again for a reconsideration of his case; or the old employee who demands a pension even though the company has not given pensions to other employees and has never consciously given the impression that pensions were granted; or the executive who wants a decision in his favor, and, if it is not rendered wholly in his favor, reopens the case at each conference and insists upon discussing it to the disgust of his fellows; or the business man who loses a lawsuit and then carries the case to higher courts until the lawyers decide to neglect it or to postpone it indefinitely.

Why do these individuals persist in their fixed ideas? One reason may be that the ego of the complainant has been assailed. The case or adjustment in his favor is desired, not for its intrinsic worth, but, as he says, "It's the principle of the thing." He wants the decision in his favor, because he needs it to make himself appear worth while in his own estimation. The complaint is often symbolic of an

inner desire for greatness which cannot be achieved through normal channels. The really big business man is willing to compromise and does not feel that he has compromised his own integrity or worth. It is the little fellow who cannot accept anything except complete surrender from others. The person who has some great achievement to his credit does not feel the need of small concessions. It is well, therefore, to try to make the complainant feel satisfied by showing him that you admire him for certain other qualities. In the language of the day, "Feed him taffy."

Most of the persons who develop these fixed ideas lead a routine or a narrow life. The employee who operates a semiautomatic machine for six days of the week and then goes home to a lonely room of his own where he sleeps until the next day is a fit victim for fixed ideas. Sometimes managers wonder whether they do not supply too many side activities and forms of recreation for their employees. The danger from these extra activities lies in the fact that they are often patronized by one group or clique and the backward employees who need more contacts do not take an active part. To prevent this, it is well to see to it that each employee does take an active part in the company's recreational activities or in some other activities not sponsored by the company. The employees should have committees appointed to look after the retiring fellows who do nothing at all for recreation. Each and every employee should be expected to attend the company picnic or to show his department head an acceptable reason for not attending.

Executives themselves may lead too narrow lives. Of all the men whom the writer has ever met, the one most fixed in his ideas is an able executive who lives for business only. His two-year-old baby and his wife are merely incidental parts of the home, like the furniture. His mental and emotional life is too circumscribed, and, when he attends a conference where he can talk, his associates will be angry and disgusted with his harping upon non-

essentials that were considered settled long ago. To be normal, man needs many intellectual, emotional, and physical exercises.

Negativism.—One of the greatest problems of the executive is that of securing the coöperation of his associates and subordinates. Whenever any program of action is suggested which involves some absent member of the organization, the question arises as to how to handle the absent but important individual. The point is raised as to how to sell the idea to him. Some member of the group may suggest: "Well, let's ask him to do the opposite of what we want and then he'll want to do it." A few employees always seem to carry a negative attitude toward any ideas that are proposed to them. How did they acquire such reaction patterns?

In many cases of negativism the habit pattern was established by the persons who reared the individual as a child. If we observe a mother rearing her child, we find that she is constantly telling the child what to do and what not to do. The commands flow in rapid succession, like "Wash your face," "Say 'Thank you'," "Give the toy to little brother," "Come here," "Stop that," etc. Most of these demands of the adult come at times when the child is busily engaged in some absorbing activity, such as building a castle, flying an airship, or slaying a giant. Small wonder that he feels that the adult is a sort of tyrant that spoils his fun and burdens life with innumerable trivial orders, the value of which he does not understand. Children who have too much attention from parents may withdraw into themselves and daydream rather than play active games, or they may voice their resistance in their dreams at night when they talk to themselves and say: "I don't have to," or "I won't do it." Boys who are reared by a mother and several older sisters who supervise every act of the child often acquire this negative attitude toward all women, and, if they marry, their wives are apt to say: "My husband loves me and I love him but he does just the opposite of anything I tell him to do." Small wonder that he is negatively set toward the requests of women, who have "lorded" it over him for years!

Negativism may be expressed passively, as in doing nothing when something is expected of one or it may be active negativism—doing the opposite of what is expected. In some forms of insanity the individual may be so negative as to refuse to obey the normal promptings of the bodily processes, such as swallowing the saliva.

In industry, negativism may find an outlet in joining labor organizations or in performing duties to the point ordered but no farther. The executive who finds that his employees do what is asked of them but no more may take stock of himself to learn whether he has hired a group of employees who were negative when hired, or whether he has made them negative in attitude by the tone of voice and the manner in which he gives orders. The dictatorial type of executive may get results by cowing his employees or by brilliant tactical strategy, but he seldom gets that teamwork that gives joy to the executive who knows that "the boys are with him to the utmost." The great leader of men has learned that it is best to explain the reasons for his requests in a straightforward but friendly tone and manner which convince the employees that he believes in and likes them.

Regression.—The executive occasionally meets the man who acts and dresses in the manner of several decades ago. We have met the type of man who talks of the good old days when boys were gentlemanly and girls were virtuous. He is simply giving evidence of having outlived his age. The problems of his present are too great for him to solve satisfactorily and he regresses mentally to a former happier state when he was well adjusted. The employee who once had a good job but lost it may still live in that former happy state, or he may react to his present situation in an aggressive manner and face the future rather than the past. Psychologically, old age sets in just as soon as

the past appears to be more pleasant than the present and the future. There is but one stage in the life of man when all his wants are satisfied just as soon as they occur, and that is when he is an embryo. As soon as he is born he begins to have wants which are not always satisfied when they occur. He must adjust himself to his world until death overtakes him and ends the process of adjustment.

The unmarried woman may regress to the days when she had a lover but lost him, or she may face the future with a zest for new loves and new worlds to conquer. A broken engagement, failure in studies, bankruptcy in business, or discharge from a good job should cause no tears, but should set the individual for a stronger attack upon new ventures. Failure to do this is illustrated when an older employee is spoken of as having failed in a hard job or a business for himself and then the remark is made, "The experience took the heart right out of him."

In some forms of insanity regression takes place to an extent that is almost unbelievable. The patient goes back to childhood in talk and conduct. The people who regress are unhappy because they are no longer children. The world has moved on but they were left behind. In the stress of modern problems, people like to take refuge, through their imaginations, in the mental life they experienced when they were happy, care-free children. They find it satisfying to regress at times:

> Backward, turn backward, O Time, in your flight!
> Make me a child again, just for to-night!

The girl who longs for the ignorance and the innocence of preadolescence finds adjustment difficult. It would be better for her to prepare for motherhood, or, if unmarried, to sublimate her sex energies into socially acceptable channels.

The person who regresses from present reality is pursuing the very opposite of what the man who is in tune with the new American tempo pursues. What should be the attitude of the new executive toward an organization

that is antiquated in methods and attitude? Should he "clean house" and "fire" most of the employees and executives and import new blood or should he try to revitalize the old members? We must remember that neural pathways cannot be erased and new ones formed at a moment's notice. The behavior patterns that are in the nervous system of the old employees were put there by many thousands of repetitions and new ones are difficult to produce. Shock is the only quick method. To rebuild an old organization may require so much time, effort, and inspiration on the part of the key executives that the end does not justify the means. However, this does not imply that all the old timber of the structure is bad. Some members with the scars of battle may be better because of having withstood the onslaughts of competition. The better policy may be to save the good material and scrap the outworn.

The Œdipus and "secretarial" complex.—Occasionally we meet the boy of seventeen who marries a forty-year-old high school teacher. These marriages are not necessarily of the mercenary variety. The widow or spinster seldom has money. Sometimes she has several children older than the bridegroom. Why does a young man marry a "girl" of that type?

In the Greek myth, Œdipus was led to kill his own father and to marry his mother—Jocasta. Freud and his followers have presented some evidence to indicate that boy children become fixated toward the mother and girl children toward the father. The latter fixation is called the *Electra complex.* Some of the greatest men of history never married until their mothers died and then they still continued to admire their mothers more than their own wives. The love life of the average individual passes through four stages: love of self, *babyhood;* love of parent, *childhood;* love of chum, *early youth;* and love of mate, *adolescence.* The best adjusted persons also attain a fifth stage: *creative love.* They and their mates identify their personalities in absorbing tasks of rearing children, developing a happy

Fig. 8—The five levels of the love life. The love life of the normal person is thought to pass through four or five stages. In babyhood, the child loves itself; in childhood, it loves its parents; in early youth, its chum; and in adolescence, the mate. If a person fails emotionally to progress through these stages, he may have the corresponding fixations of Narcissism or excessive love of self; Oedipus or Electra complex or love of a parent; and homosexuality or excessive love of a person of the same sex. Love of the mate in marriage is the normal state for the adult. A few gifted individuals attain the fifth level where husband and wife have a creative love or an interest in work that is greater than they are. In the past, this creative love has occurred most often in a mutual interest in the rearing of the children.

home life, and pursuing successful vocational activities. Clinical psychologists have found that the boy who fixates his emotional life in the form of the mother image may have feelings of jealousy toward the father, who is the great barrier between his own love and that of the mother. In later life, the grown-up boy may then become rebellious toward constituted authority of the school, the church, or the state, because these are symbolic of authority. However, no statistical evidence has been collected to show that labor agitators were given too much affection by their mothers.

When a mother hugs and kisses her small boy more than she does her husband, she may be conditioning him for bachelorhood or for a troublesome married life. It is often quite natural for mothers to feed their starved affections upon their children, because the fathers are too busy in the office and the shop to be companions to their wives. For awhile after marriage the husband may have given the young wife all the loving companionship that she craved; but, as time went by and the children came, father had to get his nose closer to the grindstone; consequently, he delegated all the care of the children to the mother. The joy of marriage should be one of a creative love for the rearing of children. Otherwise, the children may tend to be conditioned too closely to the mother. Some mothers say that they are unable to enjoy their children. Well, children are not a form of entertainment; they are a job, but a joy-giving one. They should be prepared for adult life and to take the place of the parents who will have to pass on the responsibilities of life to their youth. When we hear boys say that they will not marry until they find a girl "like mother," or when girls say that they will not marry until they find a man "like dad," we know that these children were given too much affection by the parents. The "secretarial" complex of business is one result of the overly affectionate mother. Some executives have a childlike dependence upon their secretaries. The executive who claims

that he has the perfect secretary would be displeased to know that she is really average when compared with other good secretaries. His admiration is based upon the unconscious associations that she has with his mother. In such a situation, the secretary represents the mother image to the executive and she may be the most powerful member in the organization. His subordinates soon learn that she must be kept "sweet" toward them. The secretarial complex is not wholly bad in its mild form. To some men, it is a logical and helpful means of emotional adjustment. It becomes questionable when its owner happens to be married and divorces his wife in order to marry his secretary.

The Œdipus complex is also of importance to the business man when employees will not leave the home town of their parents, even though their parents do not need them at home. Sometimes the individual is in a state of mental conflict, because he is torn between the normal desire for a mate and the old love of his parent; or, if married, between the love of the mate and that of the affectionate mother. Emotional conflicts of this type are taking place in the minds of employees at times, and in this way may unfit them for a whole-hearted application to business and life.

Projection.—Two automobile drivers collide with each other and telescope their fenders. What happens? Do the two drivers get out of their cars and apologize to each other? Is their first reaction that of arranging for an adjustment? Usually, the response indicates that each driver blames the other. It is difficult for a driver to admit that he made a serious mistake; to do so would detract from the importance of his ego.

Ask a drunkard the cause of his downfall and he will have some plausible explanation. It may have been his early companions, his mother-in-law, or his wife. This rationalization usually develops in some accidental manner, as when the intoxicated husband comes home and his mother-in-law meets him at the door and chases him away

from home. He then broods over the affair and blames her rather than himself. Finally, he comes to use that explanation of his alcoholism as a satisfactory mechanism rather than admit frankly that he is unable to face his problems and must escape reality by the drink route.

Occasionally we hear unjustified rumors of immorality arise as a result of projection. A woman employee accuses some reputable and important member of the company of gross immoralities. Such stories throw undeserved suspicion upon the accused individual. The suspicion should really be directed toward the accuser, for the accusing woman is merely projecting to some one else the impulses that she herself is trying so hard to combat. She could not bear to admit to herself her terrible impulses and so she built up pictures of others who did the things that shamed her self-respect. Many a reformer has retained the integrity of his selfhood by joining an organization to combat those same tendencies that the reformer had to fight in his moral life. The fanatical reformer and chronic accuser are often unpopular among people in general and the unpopularity is partly deserved. If they have a normal desire to improve the world, they will tend to do it in a more quiet and tactful manner than that of crying their aims from the housetops.

The student who fails in an examination often projects the cause to the unfairness of the teacher. The man who slips in his marital relations tends to cover up his digressions by accusing others of infidelity. The man who fails in business does not, as a rule, blame himself, but imputes his losses to the "powerful forces of Wall Street." The production foreman who falls down on his schedule may have sound reasons for so doing; but it is to be expected that he will suggest that the blame should be placed on some other executive. Forceful executives often develop the habit of asking their subordinates to perform certain jobs and of implying, when the orders are given, that excuses are not going to be even considered. This method has decided

benefits, because it causes the operating executives to spend their mental efforts in working out schemes for the accomplishment of the desired end rather than in seeking logical excuses. The salesman who fails to "bring home the bacon" usually has a brief case full of reasons why the sales could not be made. The executive who insists upon results and results only may develop the reputation of being hard-boiled, but his methods are sounder psychologically than those of the other man who listens attentively to the excuses of his employees. Any organization that is made up of a large number of "projectors" is also a red ink organization.

The executive himself often projects his failures to his employees. If the balance sheet figures are unsatisfactory, he can blame others, or he can calmly analyze the situation for the causes of failure and then busy himself on an improved plan of procedure for the next fiscal period. "Passing the buck" satisfies the "passer," but does not bring objective results.

Introjection.—In projection, we shape the world to suit ourselves—to the satisfaction of the ego. In introjection, we do the opposite. The world shapes us in the images of itself. The introjectionist follows the surge of the crowd. In time of war, he believes all the propaganda that is put out by his side. In politics, he remains within the party lines and cheers without mental reservation for his candidate. He does not calmly analyze and then choose the better of two or more courses of action, but he adopts one course with all his emotional power. In business, he is the "carbon copy" man, the "yes" man. He tries to anticipate the slightest wishes and beliefs of his boss and then adopts those as his own. He likes to be dictated to and ordered about. He dwells within the shadow of his superior and scrapes and bows to the fiddling of those above him. His coöperation is as blind as it is devoted.

Some executives seem to prefer an organization of introjects. They are easy to handle. They satisfy the ego of

the executive and he imagines that he is in full control of his employees, but his organization is one that neither thinks nor analyzes. It is too pliable. Some introjects are good secretaries, but they are poor material with which to build a hard-hitting organization.

What can the executive do when he finds that an otherwise good employee is too willing to imitate him? He can make at least one attempt to reform him by explaining the situation very frankly and telling the "yes" man to agree less and to make more suggestions. The slavish employee was conditioned in that way by some other executive who may have fired him for disagreeing with the boss. An executive cannot "jump" on employees for an honest questioning of his decision and then expect them to be filled with helpful suggestions the next day. The fear of losing their jobs will give them introjective characteristics. The employees are not always to be blamed for "putty" minds. Certain executives have so strong an inferiority complex that they cannot endure the presence of subordinates who are their equals.

Phobias.—A phobia is a persistent and irrational fear of a harmless object or situation. The individual may know quite well that he has no logical reason to fear the thing that he fears. Examples are *claustrophobia*, fear of closed places; *aërophobia*, fear of high places, such as the tenth floor of an office building; *agoraphobia*, fear of open spaces, as fields or wide streets; *pyrophobia*, fear of fire; and *misophobia*, fear of dirt. The phobia usually comes on very suddenly and overwhelms the patient, who is seized with trembling, sweating, pallor, and all the usual signs of extreme fear. All this, in spite of the fact that the patient knows quite well that his fears are merely morbid and wholly without reasonable cause. Some persons having phobias are able to continue their daily work by avoiding the situations which stimulate the phobia responses. Others have phobias which unfit them for economic life.

The woman who was afraid to look into a mirror for fear

that she would find a hair on her face knew that the finding of a hair was no real cause for alarm; but still she became so fearful of seeing her reflection that she refused to handle silverware or to open her eyes in a room where there were windows. The executive who was seized with fear whenever he was in a building higher than the second floor knew that the building was perfectly safe, but he just simply could not go up to any height. The stenographer who spent most of her time in washing her hands knew that her hands were reasonably clean, but still she feared they might be soiled. The bookkeeper who feared to make the figure five knew that that figure was harmless but still he feared to make it.

In close relation to the phobias are the *manias*, such as *kleptomania*, the impulse to steal things that are not needed; *pyromania*, the impulse to set fire to things; *onomatomania*, the impulse to say a word again and again or to hunt for it in the memory; *dipsomania*, the impulse to take liquor or drugs; and *arithmomania*, the obsession to count everything, such as the stones in the sidewalk or the objects in a room.

If we accept the explanation of Freud and his disciples, we shall interpret these manifestations of abnormal fears and impulses as symbols of inadmissible impulses. The woman who could not look into a mirror for fear she would see a hair on her face was unable to do so because hair symbolized some sexual wish that she refused consciously to admit to herself. The executive who could not go higher than the second floor of a building was fearful of a moral fall which might be brought about if he yielded to an immoral impulse. The stenographer's fear of contamination was caused by the fear of repressed desires to yield to the sexual entreaties of her lover. The figure five represented the five fingers of the bookkeeper's hand which were used in a sex perversion. And so on for other fears, impulsions, and neuroses, as the oversolicitude for the health of a wealthy aunt which disguised the wish for her death. The

fear of illness or failure in an examination may symbolize the recognition that it is deserved.

In many of these phobias and manias it is easier and more logical to think of them in terms of conditioned responses or as associative linkages. It is certain that some of the maladjustments of the individual are brought about through simultaneous associations, as in the case of the man who has heart attacks and during one falls over in a crowded section of the city. He may then have a claustrophobia for years.

In most cases of phobias, the psychiatrist finds that the origin of the fear is closely coupled with a sense of guilt or shame. That is why Freud can find many illustrations of his theory that the phobia masks a repressed sex desire. Sex, to most people, is something terrible and unmentionable rather than a perfectly normal impulse. As soon as the phobia-bound individual understands the origin of his fear and is allowed to express the repressed impulse that it symbolizes, the phobia disappears. Scolding the stenographer will not banish her fear, but uncovering the origin of it will. If the fear persists, the cause has not been found. Of course, this process of adjustment is one for the attention of the psychoanalyst; but parents can do much to prevent abnormal fears.

The main form of instruction given to children by parents seems to be "Shame on you"; "Nobody will like you if you are so naughty"; "You know that you are a naughty little boy, don't you?" and "God will punish little girls who tell lies." No wonder that the children of oversolicitous parents often grow up to become fearful retiring nobodies, while roughnecks of the slums develop into business and professional leaders. Fears do not dog their every step. We must remember that the child fears in silence. Shame may be so strong that it is difficult to obtain admission. Cowardice may develop, and all because the father and mother and school have held up the bogy of shame. Every unnatural fear has a natural cause, and the attitude of the

business man toward his employees and his children must be that of the analyst rather than of the crushing, domineering giant.

Invalidism.—We have heard of people who "enjoy" poor health. They go to one doctor and improve for a short time only to find that they must try another doctor; and he, in turn, seems to help them only to have another ailment break forth in some other part of the body. Occasionally, a surgeon is prevailed upon to "operate," even though there is nothing for which to operate.

When a man is a party to a trivial automobile accident and the other persons who were in the accident learn that he carries liability insurance, some of the passengers usually develop sudden injuries for which they claim damages.

Since we have had workmen's compensation we have developed the *covetous wish neurosis* or *traumatic neurosis.* Some of the "patients" develop pronounced loss of memory, whereas others have headaches, internal injuries, or dizziness. Indeed, they have these effects so pronouncedly that they are often confined to bed for the approximate length of time that the compensation will be paid!

We can recall experiences of our own childhood, when it was easy to develop a bad headache, a stomach ache, or other pain, when the lawn was to be cut, or the dishes to be washed, or a hard examination to be taken in school. Perhaps we even had a temperature or vomited forth our food as evidence of the illness. Experiences of this type cause us to be suspicious of the friends who seem to be in constant ill health without any apparent evidence or reason for the invalidism. We often say: "Oh, well, most of that pain seems to be in the imagination." We then become disgusted with the patients, because we assume that they could get over it if they only made up their minds to do so. We lose patience with them, but the doctors continue to call and to send their bills.

Among the so-called functional ailments we often include the tired feeling, constipation, sick headaches, insomnia,

dysmenorrhea, and indigestion, when caused by the eating of certain foods which others can eat without harm. It is probable that a few persons are unable to eat certain foods because of peculiar chemical reactions in the digestive tract, but most of these delicate stomachs function normally when the individuals are put into a normal environment. Persons who cannot eat eggs without pronounced indigestion will be able to eat eggs when they are required to do so by a doctor who eats with them and insists that he will take care of any indigestion that may result. Some of these ailments do have a real basis, but most of them are merely functional. We must bear in mind that a pain is felt through the mechanism of the brain rather than at the point of injury. A psychological pain, therefore, is just as painful as a real organic pain. We do our friends an injustice when we tell them that they only imagine the pain and that, if they only wanted to do so, they could forget it. They are not helped by scoldings. Rather, they become worse. But, on the other hand, we should not coddle the patient.

We say that the pain of the psychoneurotic is in the "head." Well, all pains are felt in the head. Surgeons tell us that, when they sever the foot of a soldier, the soldier can still feel the ache of his corns or the bedclothes pressing on his "foot." The war veteran who had both feet cut off and yet predicted the weather from the aches of his corns was not merely "joshing" his hearers. Stimuli passed over nerve tracts which, formerly, conveyed impulses from his corns, and the response in his brain was exactly the same as it had been before he had his feet cut off.

Some pains are conditioned responses, as we can readily see in many children. If father sits down to the table and tells mother that spinach gives him indigestion, all the little members of the family tend to develop the same symptoms when required to eat their spinach. Mothers who suffer from painful menstruation condition their daughters to the same pains when they reach maturity.

For this reason, intelligent parents never discuss their aches and pains in the presence of their children. Epidemics of various sorts have been reported in schools, where one child had a real or a functional ailment that impressed the other children.

One of the writer's colleagues in psychology specialized in certain phases of the subject, where he had frequent contacts with the surgeons of a large city hospital of New York state. He developed a close friendship with the two leading surgeons of the hospital staff. These two surgeons were good friends and worked together, but each smoked a different brand of cigar. Each surgeon claimed that the other's "rope" would make him ill if he should smoke one of that brand. One day the psychologist and the two surgeons were at work in the hospital laboratory and all of them were smoking their favorite cigars. The psychologist, unknown to the surgeons, changed the bands on the half-smoked cigars and allowed each to complete the smoking of his own cigar. He then called attention to the bands and said that each surgeon had smoked the other fellow's cigar. Each surgeon then claimed that he wondered why he had felt so peculiar and one of them actually became nauseated! Medical students often develop the symptoms of the patients whom they study. When the writer arranges tours through state hospitals for the benefit of his students, he usually finds that one or two students develop enough symptoms to require some form of treatment. In some cases, the student must be sent to several psychiatrists for treatment before he recovers. Suggestion, no doubt, plays an important part in many of our functional illnesses.

However, in this discussion, we want to give emphasis to the fact that illness may be a means of escape from unpleasant situations. The classic case of the girl who was engaged to the man she loved, but became totally deaf when she realized that he no longer loved her, is illustrative of a definite attempt to escape reality through illness. She

became deaf on the evening when her sweetheart called with the express purpose of telling her that he no longer loved her and wished to be released from the engagement. Before he could tell her, she became deaf.

Thousands of employees realize vaguely that they are just a little too weak to become great executives, and, unable to admit their limitations, they may make an adjustment by becoming sickly. Their sickness is an acceptable excuse for their vocational mediocrity or failure. Their wives, parents, and friends have no right to expect them to accomplish very much when they are too ill to work hard.

Remedies for invalidism.—What should be done for those unfortunate psychoneurotics and others who try to make an adjustment to reality by the avenue of illness? Scolding will not help them; it only makes them worse.

An important remedy is that of never saying, "Use your will," but instead, "Understand the cause of your trouble." If the physician makes exhaustive tests and can find no just cause for the illness, then ask the patient to analyze himself or to have himself analyzed for problems from which he is running away. Induce the patient to face the situation which he dislikes to admit to himself. He must be convinced that the defect or the inability to accomplish his present aims should be used to achieve another end that is equally acceptable. The main remedy is the trite statement that the cause must be removed. To do this may require considerable time and effort on the part of the psychoanalyst or the clinical psychologist. Unless the patient is very intelligent and has read a number of books on abnormal psychology, he is unable to analyze himself and to make an adjustment. He needs scientific analysis rather than censure.

The patient should associate with others of a satisfying personality. Many social and religious workers take up their work of helping the extremely unfortunate because they are unable to adjust themselves to reality. It is easier

to achieve self-worthwhileness by assisting or dominating those weaker than ourselves than it is to achieve greatness among our equals or our betters. If the patient can be induced to take the attitude of the learner and to associate with those more able than himself, it is well for him to do so. But he must feel that he is welcome in that group and that the members of the group are sympathetic rather than critical toward him. Otherwise he will tend to withdraw into himself more than ever and will have more acute pains. The attitude of the associates of the adult invalid must be one of positive and helpful sympathy toward him rather than mere sentimentality, condolence, or pampering.

As in practically all other psychopathic conditions, the patient should be given work to do that requires complete attention. It is probable that, if some of our American citizens who are "sickly" had to keep as busy as their grandparents did in their day, they would have fewer ills. Work never causes nervous breakdowns. When a person becomes a neurotic or has a serious mental disturbance, his friends attribute it to overwork. Work did not cause the breakdown. It was caused by worry, a mental conflict, or some other inability to cope with reality. We should never tell people that they work too hard, but we may tell them to enjoy life more. If work is a pleasure, then it may be carried on at all hours and for any number of years, so long as the body is given a normal amount of exercise and care.

Children are often told that they are "nervous" and should not study or work. This is a serious mistake. It is far better to allow them to learn the joy of strenuous work and play. If they are not reminded of illness, but are always told to face life aggressively and actively, they will seldom develop nervousness. Of course, we should not ask others to work in order that they may be as wealthy or as important as some one else; but rather because, through work that is adapted to their capacities, they can achieve

the greatness that comes from doing well that which they are talented to do.

It is difficult to secure data to prove that women are more afflicted with invalidism than are men, but many physicians judge this to be true. If so, it may be partly caused by the fact that we are more solicitous of girls than of boys. When Johnnie, aged six, comes into the house, crying because of a skinned nose, we tell him, "Be a man and stop crying." When his sister, aged eight, comes into the house crying because of a skinned knee, we tell her, "Well now, that is too bad. Let's see that knee. Maybe we can put something on it to make it feel better." We still give women the impression that they are weaker than men and, therefore, that we must defer to them because they are women. Daughters should be required to work just as much as sons. The work may be different, but they should sense the joy of a positive productive life rather than the negative attitude of attention through illness.

Habit spasms.—Have you ever been in a railway station and seen a woman stick out her tongue at intervals of every two minutes? Or have you seen the boy who recurrently pulls up one corner of his mouth until every passer-by notices him and wonders, "What ails the kid?" Or the girl who winks at you with so pronounced a wink that you wonder how she became peculiar? Or have you heard of the man who was taken to the hospital because he would lie in bed, put his heels and the back of his head on the bed, and then give himself a toss that would throw himself toward the ceiling? Or have you seen cases of chorea or St. Vitus's dance? The term "tic" is usually given to those muscular twitches which involve only a few muscles. Movements that involve a large number of muscles or the whole body are called "choreic movements." Habit spasms are found most frequently among children, but people of this type come into an employment office and the employment man is apt to say, "Did you see that fellow with the 'Hebe-Jebes'?"

Why will a person act in so peculiar a manner? The origin of most of the "tics" in children is some simple irritation of the clothing, such as a tight sleeve, tickling of woolen underclothing, or a sore pimple. The child finds that the movement attracts attention to himself and continues to make the movement even after the cause has been removed. It acts as a sort of pacifier. The movement gives relief from the tension that comes with the urge to do an act when it is inhibited. The satisfaction gained is similar to that of the college girl who is anxious to be popular, and, finding that the boys are not attracted to her in large numbers, she then talks or acts in a loud manner; or an employee in business has the ambition to be a big executive, but promotion is slow and he relieves the tension by adopting a distinctive activity. Recognition must be obtained in some manner and it is natural for the habit spasm to continue after it has given the ticquer much attention.

Does the tic indicate a dangerous mental abnormality so that the individual should not be hired? The answer is that he is no more dangerous than the individual who compensates in a less spectacular manner by going into Sunday school teaching. Of course, if the individual attracts the attention of employees or customers to himself rather than to the work that the employees are to do or the goods that the customers should buy, then the ticquer is a nuisance. It is, however, inadvisable for the employment executive to hire the applicant having a tic with the thought that the habit spasm will soon pass away or that he can cure it. These habit movements are usually very resistant to treatment or elimination.

Sexual anomalies.—The most remarkable illustration of the strength of the cortical control over the instinctive or animal nature of man is that of sex customs of modern civilization. Bear in mind that, throughout the millions of years of evolution of man's forebears, no males took part in that whole line of descent except those who had some sex impulse. Small wonder, then, that it is a strong force in the

life of man. Freud and his followers have much evidence whereon to build their brand of psychology. With so strong a force, need we wonder that perversions or anomalies take place in the sex lives of a small percentage of the people whom we meet. The occasions when it is necessary for the business man to deal with serious sex problems, such as perversions, are few in number. Many business men think that they can recognize the sex pervert when he applies for a job. This is not true. At least, no evidence has ever been obtained which indicates that it is possible to recognize the homosexualist. When an executive meets a stranger and classifies him as a sex pervert merely on the basis of appearances, such as pimples on the face or the gaze of the eyes, he is just guessing. The stranger may accidentally give him such an impression because of some characteristic of clothing or voice or other peculiarity which unconsciously reminds the executive of a pervert whom he has met previously. The men who think that they can recognize a sex pervert are merely deceiving themselves.

In terms of Freud, the tendencies of the child are *polymorphous* or many-form. The sexual sense has not developed in the young child. Later it develops, and, as it develops, it tends to center its aim in some special direction; usually toward the opposite sex and normal conduct in sex life. However, the child may be developed in any direction according to the influences that take place in the conditioning process. Nature has given man a strong sex impulse, but civilization has fenced in the impulse with dozens of taboos. It is only natural, therefore, that masturbation should be the most common perversion. A passing addiction to it in infancy is considered normal by many psychologists. Contrary to popular interpretation, masturbation is not to be considered as a cause of insanity but as a result or accompaniment of it. As stated by an eminent physician who has studied the subject: "Some young men go insane over their inability to abstain from masturbation. Warnings against masturbating may be well meant,

but the pictured evils are vastly exaggerated, and the consequent harm done to young men and to girls is infinitely greater than any possible harm done from indulgence in the habit. Masturbation may occasionally do harm to a weak-minded subject, but the idiocy or nervous affections, 'loss of manhood,' etc., are less frequently the result of excessive masturbation than excessive masturbation is the result of idiocy; idiocy is not the *result* but the *cause* of masturbation." [2]

Sadism refers to the fact that some few individuals do not express their sexual tendencies in a normal direction but gratify sexual feelings by the infliction or sight of pain. The pain may be real or it may be simulated, in which case it is symbolic. This anomaly is found among men more often than among women, which is what we would naturally expect. An example is that of a famous American millionaire who raises rabbits and then tears them to pieces with his own hands. In any large organization, one is apt to find mild expressions of the sadistic variety in the form of persons who like to pinch the other employees or stick pins into them. These individuals often make nuisances of themselves.

Masochism is the opposite of sadism. The individual has sexual feelings gratified by suffering pain. The pain may be real or simulated. The latter is symbolic. The masochistic tendency is found among women more often than among men.

Exhibitionism refers to the gratification of sex by the exposure of the body. It is the showing-off tendency in the extreme. Some students claim that the desire of some leaders in business and public affairs to be the "whole show" in the presence of others is merely substituting this type of exhibitionism for a more perverted and unacceptable variety of showing off.

Homosexuality is the term given to the desire for sexual relations with persons of the same sex. In this connection

[2] Wall, O. A.: "Sex and Sex Worship," p. 166, C. V. Mosby Company, 1922.

we must bear in mind that no one man is wholly male, nor is any one woman wholly female. Sex-ness is a relative trait. We are mixtures of physical and mental traits. Many women have the general bodily conformation and pilosity which is characteristic of the male and many men have some typically female traits. It is rather to be expected, then, that some individuals would prefer members of their own sex. An exciting cause of homosexuality is that of isolation of the sexes such as we have in penitentiaries, on board ship, and in girls' boarding schools. "Crushes" are likely to develop where the sex impulse, real or simulated, has no normal outlets. Coëducational colleges are more in harmony with the mental life of human beings than one-sex schools. In the coëducational institutions the two sexes mingle with each other in a normal manner. The family type of contacts is present. A boy is not some heroic sexless knight in armor to the girl who sees him each day in the classroom and notes his humanness when asked a question by the instructor. Boys and girls will continue to fall in love with each other until human nature changes, and the best preventive of sexual anomalies is to give the child and youth a sane and normal sex environment.

Projects.

1. Analyze yourself for any mild or pronounced psychopathological adjustments. Can you suggest possible causes of your abnormal behavior?

2. Study the personnel of a department or an institution. Can you select individual members who have "identified" themselves with certain leaders?

3. If an employee works for a superior who is abnormal and very difficult to please, what policy should he pursue in their relationships?

4. If an executive suspects that an employee is dangerously abnormal, what should he do?

5. Ask several persons about their attitude toward and in-

formation about masturbation. Do most of them have an erroneous impression of its harmfulness?

6. What mild form of mental abnormality may be represented in each of the following behavior types?

a. The woman who tries to outdo her neighbors by lavish entertainments which are beyond her means and are not expected of her.
b. The girl who is unable to find a young man who is as nice as her father. She says she will not marry until she finds a man as good as her father.
c. The fellow who fails to get a certain job and then claims that the lucky applicant has a "pull" with the general manager.
d. The poor student in college who claims that brilliant students never amount to much in later life.
e. The man who gets drunk.
f. The moody girl who is easily fatigued and very irritable.
g. The student who becomes seriously ill every time he has an examination or difficult lesson in school.
h. The man who constantly talks of the good old days when he was young and boys and girls were more courteous. He longs to live in an age which is past.
i. The girl who is a domestic, but daydreams of the time when she shall marry a wealthy man and snub her mistress.
j. The little man who stares at you with a very hard cold gaze.
k. The man who is afraid to go up in the elevator of a building.
l. The man who must count everything in a room.

7. Which of these statements are true and which are false?

T. F. a. Normal people never regress to the infantile forms of behavior.
T. F. b. A child's boastfulness is an effort to compensate for his feeling of inferiority.
T. F. c. A grown-up bully is an unimportant person trying to be recognized as important.
T. F. d. Those who regress do so because they are unable to face the situation at the present moment in a grown-up way.
T. F. e. Growth stages must be mounted in mature years as well as in adolescent years.

T. F. f. The romantic art of fiction usually fixates at the erotic, falling-in-love stage.
T. F. g. The misunderstood wife or husband tends to have a projective mind.
T. F. h. The shy person is the victim of his own faults.
T. F. i. The introjective mind tends to be the critical mind.
T. F. j. "He that conquereth himself is greater than he that taketh a city."
T. F. k. A person always knows the reason for his maladjustment.
T. F. l. Disease symptoms may be substitutes for strong suppressed emotions.
T. F. m. The best treatment for invalidism is sympathy and coddling.
T. F. n. Parents should listen sympathetically to all complaints of children.

CHAPTER VI

Methods of Treating the Psychopaths

When an employee or a friend develops a serious mental abnormality, he should be treated by a professional psychoanalyst or psychiatrist. Certainly, the business man cannot undertake to cure major mental ailments; but, if he can understand the methods used by the trained expert, he can understand and deal with minor abnormalities among his employees and associates. Suggestions for the treatment of specific psychopathological cases have been made in preceding chapters, but it may be helpful to discuss these suggestions (enumerated below) in greater detail.

1. By improving the physical health of the patient.
2. By psychoanalysis.
3. By hypnosis.
4. By hypnoid states.
5. By reëducation.

The physical health of the patient is the underlying cause in many cases, but this is a problem for the physician. Before any attempt is made to treat the patient by psychotherapeutic methods, there should be a thorough physical examination—not merely taking the blood pressure and counting the pulse—in order to eliminate any possibility of an organic cause of the malady. This examination should be as complete as possible and should be made by a physician who specializes in diagnosis.

What is psychoanalysis?—Sigmund Freud of Vienna is the originator of the technical method of psychoanalysis. He published his first investigations in 1895. Freud had studied many cases of nervous disorders and was convinced

that the main cause lay in repressed wishes or desires. The repressed desire or impulse was of a sexual nature and had been repressed by the forces of education and social conventions. When the wish is repressed it remains alive and active in unconscious form. The theory, to many people, appears to be weird, while to others it holds a strong interest for its mysterious interpretations. Perhaps we should spend a moment in reviewing the experiences which gave Freud his method of attacking, or treating, psychopathological maladies.

Previous to 1890, psychology had already considered mental abnormalities. Hypnotism was known, and it was noted that, when patients were treated in certain ways, they developed multiple personalities. That is, they regarded themselves and acted as though they were different persons at different times. Sometimes one personality could not remember the other personality of the same individual. In other cases, the various "personalities" might be more or less conscious of each other. This was then interpreted to indicate that nervous diseases were the result of a splitting off of consciousness. One portion of the associations of the mental life broke off and formed a new or smaller "mind" of its own. Compulsions and obsessions were explained in this way and the physicians of that time used hypnotism to reintegrate the dismembered personality or mind. In the hypnosis, the physician tried to suggest the split-off part of the mind back to the main body of the personality. Freud was a physician and treated his patients in this manner.

In the early years of his experimenting, Freud noted that some patients remembered things when they were hypnotized that they could not recall when in the normal state of consciousness. Then, when these forgotten facts of a painful nature were presented to the patient in his normal state, he showed very strong emotions. He seemed to respond to these unpleasant and forgotten facts in the same manner as though he were actually experiencing the painful situation that had been buried in the unconscious. In

some cases, the painful experience had occurred many years before and the patient had been unable to recall it. When, however, the painful experience was brought to the full attention of the patient and he reacted to the recalled situation with the same emotional responses that he should have had when the situation occurred years before, the patient became well. The conclusion was naturally reached that the abnormal mental states of the neurotics were caused by the fact that the neurotic had not made a complete and satisfying emotional response to some of his unpleasant impulses or experiences. The bringing-about of a belated emotional response in order to clear up a neurosis was called the "method of catharsis" and the new or belated emotional response was called the "abreaction."

Freud found that some of his patients could not be hypnotized, but he also discovered that the patients could themselves recall their forgotten experiences when they were encouraged to talk freely and at random. In these experiments, Freud found that the dreams of his patients were often related to the unpleasant things that they were trying to recall or uncover. He made studies of thousands of dreams and learned that the dream is symbolic of some repressed or hidden wish, that it may relate to infantile experiences, and that the repressed wish is one which, ordinarily, we do not admit that we would even entertain. In some dreams, certain symbolisms occurred again and again, such as snakes, falling, seeds, mountains, and wild animals. Freud interpreted these symbolisms to represent repressed desires that we refuse to recognize or carry through emotionally, and so they are stored in the unconscious and are allowed to come forth only in the dream life of the patient or in some abnormal manner during his waking hours. Most of these desires are of a sexual nature, because sex is the one strong impulse that cannot be expressed freely in our present civilization.

The psychoanalyst considers the sex symbolisms as merely convenient means of reaching more certain conclusions and

he uses them in much the same manner that the mathematician uses the symbol x in algebra. The true psychoanalyst does not use these sex symbols as definite proof of the nature of the repression until he has further evidence from the past experiences of the patient. The faddist who dabbles in psychoanalysis is apt to jump to erroneous conclusions when he knows some of the sex symbols, but does not appreciate that the symbolisms are merely working hypotheses until a verifiable conclusion is reached. Moreover, the psychoanalyst does not think of the sex impulse in quite the same way that the layman does. The former uses it in the genetic sense.

The "censor" (better, censorship) refers to the group of influences which require the individual to repress his normal impulses. These influences are the social standards of our times, the reproofs given in childhood, and the many repressive influences of modern life. The reason why the individual patient's dreams express the repressed impulses more readily than the acts of his waking life is because these repressive forces are parts of our conscious or intellectual life. When we are asleep, the conscious controls are weaker, the censorship is relaxed, and the impulses come into the dream consciousness in symbolic form.

In addition to the study of the dream life of the patient, the psychoanalyst also uses "free association." This method simply means that the psychoanalyst has the patient come to his office and makes him physically comfortable in an easy chair or on a couch. All possible distracting influences are removed, and monotonous noise is provided. The patient closes his eyes, and the psychoanalyst asks him to think of some part of his personal history which the analyst wishes to investigate, and tells him to think aloud and to say everything that comes to his mind, no matter how trivial or how unpleasant it may seem to him. The object is to discover the repressed experience or submerged complex that had not been allowed full emotional expression when it occurred in the experience of the patient. The

patient is asked to report his dreams and to express his thoughts freely. In this way the analyst tries to unravel the network of experiences that caused the disturbance.

The analyst may also use word associations. To do this he prepares a list of words that may have some relationship to the patient's history, and asks the patient to give the first word or idea that comes to mind when the words are spoken. The analyst records with a stop-watch the time required for each response to the stimulus word. After the list has been completed the patient is taken through the list again and differences in responses are noted. When a stimulus word touches upon the repressed experiences or complexes, certain disturbances are noted, such as the peculiarity of the kind of reaction, the increased length of time for the reaction, and the failure to repeat the former reaction. White [1] reports the associations of a patient who had made several attempts to commit suicide:

Stimulus Word	*Reaction*	*Time*	*Reproduction*
To harm	Self	6.6	Any one
Stork	Large	4.4	Large
False	True	1.8	Not true

The average reaction time was about 1.6 seconds. In the above examples can be noted the lengthened time of reaction, inability to recall the reaction on repetition, and the irradiation of the disturbance to the next two reactions as shown by the lengthened time of reaction. This patient had a brother who was arrested and brought into court, and she gave bond for him. She made the following responses: *prison*—cell—4.2 seconds; *bond*—pay—4.2 seconds; and *judge*—to be judged—4 seconds.

In addition to the method of catharsis, the analyst may use *transference*. This is an attempt to relieve the emotional tension by having the patient project upon the analyst all the emotional tensions that are uncovered in the analysis. Emotionally, the analyst takes the place of

[1] White, William A.: "Outlines of Psychiatry," p. 338, Nervous and Mental Diseases Publishing Co., 1923.

parent, lover, or enemy. It is apparent that transference requires a great deal of skill on the part of the analyst and many specialists do not use or advise it.

To psychoanalyze a patient requires much time. Months and even years may be required to unearth the painful experiences and enable the patient to express the unpleasant emotions that were repressed years before. The personality of the psychoanalyst plays a very important part in the method. He does not offer sympathy but understanding. The patient realizes that here is one person in the whole world who is able and willing to understand her. The psychoneurotic may have felt that she has been misunderstood and that she must hide her guilt and burden from her best friends. As proof of the fact that we are unwilling to express ourselves and tell all our emotional experiences, ask a group of persons to tell all the dreams that they can recall. Few indeed are the husbands who are willing to tell their wives all their dreams or the thoughts that have entered their minds. If the psychoneurotics could only realize that each and every impulse or idea that enters consciousness has a normal and natural cause, it would be vastly easier for the mentally afflicted to deal with their own emotional selves.

In the various studies of psychoanalysis it has been found that the neurotics have tried to overcome their unpleasant experiences and impulses by means of defense mechanisms. The boy who takes pride in being the worst roughneck of the neighborhood may be acting the part of the rowdy in order to make himself feel that he is virile. To tell him that he must be more gentle does not remove the cause of the rowdiness. The girl who takes refuge in invalidism to gain attention is not helped by punishment or advice to make up her mind to get well. The psychoanalyst tries to get at the cause of the maladjustment and then to enable the patient to *sublimate* the energies or to direct them into channels that are satisfying and socially acceptable. We can see examples of *sublimation* in daily life in the case of

the man who loses his wife and then takes up golf and plays it strenuously, or the student who fails in his studies and then becomes a collector of stamps. It is probable that our craze for collecting antiques is, in many cases, an attempt to sublimate energy and achieve a sense of worthwhileness because of failure to do so in some other activity.

As a solid is "sublimated" when transformed into a gas, so a primal impulse is said to be "sublimated" when it is diverted from its original object and made to serve other ends. By this power of sublimation the little exhibitionist, who loved to show himself, may become an actor; the "cruel" boy who loved to dissect animals may become a surgeon; the sexually curious child may turn his curiosity to other things and become a scholar; the "born mother," if denied children of her own or having finished with their upbringing, may take to herself the children of the city, working for better laws and better care for needy little ones; the man or woman whose sex-instinct is too strong to find expression in legitimate, direct ways, may find a valuable resource, and increment of energy for creative work, along whatever line his talent may lie.[2]

Criticisms and values of psychoanalysis.—Freud and his colleagues will go down into psychological history as pioneers and contributors in a field which needed them in their time. They blazed a new trail in the exploration of the human mind. Many of Freud's trails led to new discoveries of great value. Some, too, led into dead-end canyons or to insurmountable cliffs. In his later years, Freud became impatient with any one who disagreed with him so that his teachings degenerated from a science to a cult. Fortunately, a few of his followers have remained loyal to science and they are now adding new contributions by their willingness to discard or modify some of the fundamental concepts of his method.

One modification of the Freudian principles is that of the repudiation of the unconscious. Some critics claim that we are not motivated by suppressed wishes, but rather by a

[2] Jackson, Josephine A., and Salisbury, Helen M.: "Outwitting Our Nerves," p. 70. The Century Co., 1925.

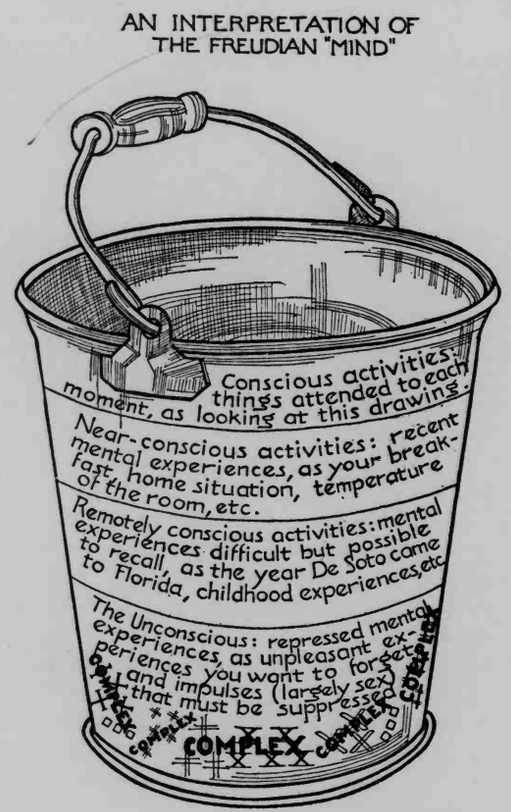

Fig. 9—One of the disciples of Freud gave the writer the above diagrammatic explanation of the *mind*. According to this view, the mind is divided into degrees of consciousness. The lowermost layer contains the suppressed desires or experiences that are not tolerated by the conscious layer. When a number of unpleasant impulsions are related to each other, they form a *complex*. The complex subconsciously influences the behavior, as when a number of degrading experiences may develop an inferiority complex. The inferiority complex may cause the individual to retire into the background, or he may develop a "superiority" complex, a form of overaggressiveness. If the complex becomes very strong, it may overcome the influence of the other "layers" and result in a dual personality, where the person changes to a more happy personality. Now read the more accepted behavioristic concept of the adjustment to mental problems in Figure 10.

series of adjustments to our situations. These adjustments are not made by a part of the mind, but by the entire individual. The organism, as a whole, responds to the stimulus. By trial and accidental success we find that one kind of response results in failure and dissatisfaction, whereas another response brings about success and satisfaction. The successful response is stamped into our neurological mechanisms and, therefore, is readily repeated. Repressed desires or suppressed wishes are not entities which have energy by themselves. They have no existence by themselves any more than my fingers have hidden peckings on a typewriter. It is only when I am stimulated as an integrated unit that my fingers peck on the typewriter. The "unconscious mind" is not subject to proof or observation but rather is an explanation of phenomena that can be interpreted more adequately by objective means.

Suppressed wishes are not entirely unconscious, but they cannot be ignored or belittled. Conflicts take place between neural pathways. A girl may react in a psychoneurotic manner because her love for a man may be in conflict with the wishes of her father who forbids her to see the man. A phobia may even arise, because of a desire which has been stimulated and not allowed expression, recognition, or admission. Normal stimuli may become associated, through action of the nervous system rather than through a subconscious mind, with abnormal responses as in the case described by Bagby:[3]

A man suffered from a phobia of being grasped from behind, the disturbance appearing early in childhood and persisting to his fifty-fifth year. When walking on the street he was under a compulsion to look back over his shoulder at intervals to see if he was closely followed. In social gatherings he arranged to have his chair against the wall. It was impossible for him to enter crowded places or to attend the theater. In his fifty-fifth year he returned to the town in which he had spent his childhood. After inspecting his old home, he went to the corner grocery and found that his old boyhood friend was still behind the counter. He introduced himself and they began to reminisce. Finally the grocer said this, "I want to tell you something that occurred when you were a boy. You used to go by this store on errands, and when you passed you often took a handful of peanuts from the stand in front. One day I saw you coming and hid behind a barrel. Just as you put your hand in the pile of peanuts, I jumped out and grabbed you from behind. You screamed and fell fainting on the sidewalk." The episode was remembered and the phobia, after a period of readjustment, disappeared.

[3] Bagby, E.: "The Etiology of Phobias," *Journal of Abnormal and Social Psychology*, vol. 17 (1922), p. 17.

Dreams are not always wish-fulfillments. A dream of falling may be stimulated by a sagging bed spring rather than by the fear of a moral fall; or a dream of being choked may be brought about by the tightness of the bed covers. Mostly, dreams are the mere automatic and chance play of the cerebral associational mechanisms. One neural pathway happens to arouse another pathway and incongruous combinations of ideas result. Certainly, many dreams are not related to the sex impulse. The child and the adult must suppress many impulses, such as those of self-assertion and gluttony. It is unfair to attribute all impulses to sex energies which are not allowed expression by our form of civilization.

It is true that the body is full of energy—energy which must be expressed in some form. The outlets for these energies may be socially acceptable or extremely harmful. One of the happiest men I ever met was a murderer who had shot and killed two of his enemies, and wounded two others. But he was an ignorant butcher who made his living by killing cattle, cutting up the meat, and grinding it for his customers. The court sent him to a hospital for the criminally insane.

The energy of the human organism may be called the *élan vital, libido,* or we may accept it, as suggested by Jung, as a striving after larger experience. Adler considers this striving as an attempt to achieve safety and power. Or we may divide the energy into the kinds of objectives and call

it tendencies or impulses. At any rate, man, as an organism, has a kind of upward-striving impulse which meets with many obstructions, and the energy must be redirected into socially acceptable channels; otherwise, psychoneurotic difficulties may arise.

The conflicts of various impulses do give rise to behavior which may be influenced by a *complex*. The complex

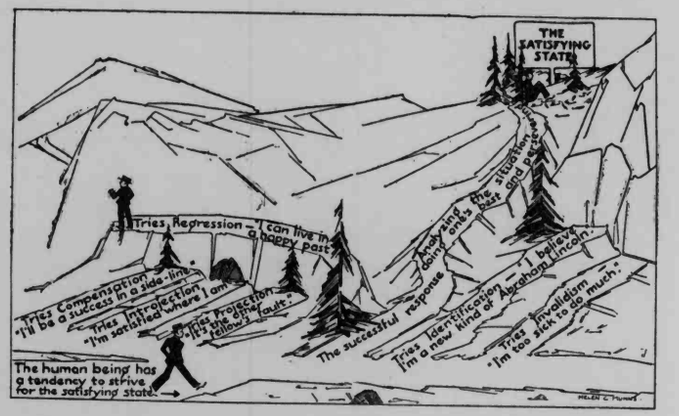

Fig. 10—Instead of thinking of mental abnormalities in terms of a subconscious mind, we may explain them as kinds of habits or forms of adjustment to problems. Each person wants to achieve a satisfying state of safety and power. He may find his problems difficult to solve and find it easier to daydream, blame others for his failure, become sickly, etc. This view of the nature and cause of abnormalities is hopeful, as we can learn how to train children to face reality and acquire normal mental habits.

should not be considered bad in all cases. Lee Wilson Dodd has written a book [4] wherein he shows that the complex is not a stain but an advantage; not a leaden drag but a golden spur. The lame foot of Byron stimulated him to become a master horseman, a good shot, and the best swimmer in England. The assurance thus gained enabled him to become a great lover, poet, and patriot.

The *complex* is a Freudian term, but the *inferiority* comes

[4] "The Golden Complex: A Defense of Inferiority," published by the John Day Company, 1927.

from Adler. Whether a handicap produces a sense of inferiority and induces a complex, or becomes a heroic resolve to achieve despite it, depends upon the type of nervous constitution which has the handicap. The executive in business can study the friends whom he has known since childhood and try to analyze their early childhood influences and note the manner in which they have tried to overcome feelings of inferiority. In the course of a decade or two, the psychologist will be able to analyze applicants in such a way as to show the sales manager how to select salesmen on the basis of their inferiority complexes and the ways in which they are trying to satisfy them. The applicant who tries to overcome a sense of inferiority by withdrawing into himself will not be so desirable a salesman as the man who tries to compensate in the opposite manner; that is, by being very cordial, superior, or helpful to others.

Dr. W. Beran Wolf claims that many sculptors, musicians, speed typists, experts in fine needlework, men who write name cards with flourishes, and others whose work demands delicateness of touch become skillful as the result of an effort to compensate for left-handedness. Those persons were potentially left-handed, but were compelled to change to the right hand. The stuttering which often accompanies the change from the use of the left hand to the use of the right hand is supposed to be caused by a sense of inferiority which is brought about by harsh treatment of left-handedness. Of course, the normal person can achieve fame just as readily as the left-hander, but he often lacks the urge. Hence, the psychologically handicapped person is the one who does not have a physical defect, such as a lame foot, a blind eye, or a palsied arm.

Regardless of its theoretical defects, psychoanalysis has given us a point of view which enables us better to evaluate the statements of the successful business man who grants interviews for articles for the "How to Succeed" magazines. The captain of industry tells the youth of the land how he worked hard or used strategy to win in the big city. He

thinks that he did it as an effort of will. As a matter of fact, he is in much the same condition as the fly who sat on the chariot wheel and remarked to himself: "Just see all the dust that I raise." The big business man has not achieved his greatness by virtue of his will power or mental acumen. He has been a mere mass of tangled wire which has been arranged into a working unit and charged with energy by the forces of his environment, such as his heredity, his handicaps, his childhood playmates, the wife who nags him in the evening, and the boss who bawls him out in the morning. The interplay of forces in his mental make-up has been accidental and he is merely playing the melody that Fate cares to hear him thrum. So far as ability to analyze the forces that have produced him is concerned, the big man in any field should discontinue the granting of interviews for publication. Of course, if he wishes to inspire youth by describing his hardships, well and good. But it would be better to attribute his success to a lame foot, bad digestion, corpulent abdomen, disappointment in love, or a poor scholastic record than to his own unaided self.

Psychoanalysis has given us a method of treatment of the insane which has been of material help, even though the persons who use it sometimes do not believe all the underlying principles. In fact, some psychologists say that the bases of psychoanalysis are not true, but it works. Since psychoanalysis has come into more or less common use in state hospitals, the percentage of cures has increased. Twenty-five per cent of all institutional mental cases are now curable, whereas, fifteen years ago, only 18 per cent were curable.

The critics of psychoanalysis would say that this advancement has been made in spite of psychoanalysis rather than because of it. Strong-minded men of the older generation marvel at the way we coddle the weakling women and children. They long to use the birch rod rather than the expensive clinic. They describe incidents such as that of the

veteran doctor who had, as patient, an ailing woman who had taken refuge from her problems by simulating a hysteria in which she refused to talk or to work. The old doctor took her to a hospital for several days of observation and decided that there was nothing organically wrong with her. He told the attending nurse to stand in the corner and do nothing, no matter what he might do. Then he turned the patient on her abdomen, pulled down the bed covers, and spanked her with the flat of his hand. Did she sit up and talk? She certainly did! Theatrical producers who deal with temperamental women artists who throw a tantrum occasionally have learned the art of smartly smacking the cheeks of the artist to "pull her out of it." Of course, such daring methods of treatment cannot be recommended for all cases of mental maladjustment any more than we could advise a father to spank his son whenever the child became physically ill. One of the great lessons we have learned from our studies of the mentally ill is the fact that a mentally sick person should be treated with the same consideration that we accord the physically sick. When a friend of ours has a broken leg or a fever, we take him to a hospital, sympathize with him, send him flowers, and visit him. When a friend is sent to a hospital for mental treatment, we should treat him, not as a "nut," but as a person who is sick, for that is what he really is. We should not attach a social stigma to the person who has been in an institution for the insane any more than we should to a person who has been in an ordinary city hospital for an organic illness.

Psychoanalysis has given us some valuable points of view. It has shown the importance of the emotions, the strength of childhood influences, and the ways in which we escape our problems or compensate for them. For the business man, it carries a significant suggestion, namely, the art of listening. The executive of the old order took a keen delight in firing his men. He knew how to put the "fear of God" into his workers. The new executive, like the psycho-

analyst, tries to find out why the employee acts as he does. He wants to know "what is eating him." If the employee can analyze himself and the executive can adjust the difficulty, then a better relationship and a more efficient employee result. The executive who insists upon remaining hard-boiled rather than analytical and skillful in dealing with his employees must expect to "live and perish by the sword." The lazy employee, the criminal, the hobo, the liar, and others are all the results of natural causes. They are now more or less understandable and curable by the specialists in mental disorders. The executive, too, must sit at their feet, and learn to use psychiatric methods in dealing with the human problems in his business relations.

Psychoanalysis and its offshoots are but a few of several ways in which mental disorders are treated. As previously stated, hypnotism has been and still is used. However, this is limited in its applications and requires great skill on the part of the hypnotist. Unfortunately, in this country it has been made a form of vaudeville entertainment rather than an instrument of science. Experts have used it to induce sleep, banish fear, dispel pain, and overcome obsessions and bad impulses. Unfortunately, it cannot be used with the insane.

Hypnoid or *hypnagogic* psychotherapy has been used. The hypnoid state is a state of consciousness which is similar to that which we sometimes experience midway between sleep and wakefulness. It is induced in a manner similar to that of hypnosis. The hypnoid method was popular for a few years when mothers were taught to sit on the bed of a naughty child and, while the child fell asleep, quietly say over and over: "To-morrow I'll be kind to my baby sister."

Religion, too, has been used as a therapeutic agent with pronounced successes for some individuals.

Reëducation.—The principles of reëducation seem to vary with the person who treats the disorder. In most cases, it depends upon the forcefulness of a dominating and optimistic but sympathetic personality. In general, psychoanalysis and reëducation suggest the following rules to the individual for his own mental normalcy:

1. *Keep physically fit.*—Avoid alcohol and venereal diseases. About 15 per cent of our mental disorders may be attributed to the effects of these two afflictions. Bodily infections seem to cause some mental illnesses. Fevers certainly do.

2. *Admit your defects.*—Bear in mind that your impulses and conduct are the results of natural causes, even though your associates consider you crude, ignorant, slovenly, or guilty of poor judgment. Do not expect yourself to be perfect. This does not mean that you should tell every one about your moral escapades, naughty thoughts, or crooked dealings. You should, however, have a friend to whom you can tell your most incriminating acts and impulses.

3. *Associate with people who are successful and happy.*—Living within one's self alone is dangerous. We all need certain contacts to give us new points of view, new thoughts, and new hopes. Attend at least one social affair each week. Call on your neighbors. Meet the fellows at the club. Go to church. Compel yourself to play cards, or dance, or sing, or tell stories, or play golf. When you do associate with others, do not consider the associates as superiors. Let your motto be: "All men are my equals, but no man is my superior." Try to learn from those who are experts in other fields, but do not envy them their money or position. Happiness does not lie in wealth, fame, or personal beauty. It is achieved through work and a balanced view of life.

4. *Keep your perspective on life.*—This old world is many millions of years old and will be here for many more millions after we are gone. We all come into the world naked and go out of it much the same way. A few more dollars, greater honors, more beautiful wives, or bigger motor cars make little or no difference in the grand totality of existence. A few troubles here or deficiences there are insignificant when we look at the stars and realize the immensity of the universe.

5. *Love some one intensely.*—Man's normal state requires an outlet for his affections. If your wife is not of a lovable sort, love your child. If you have neither wife nor child, adopt a child. If that is not feasible, adopt one anyway. A dog or a monkey may fill the gap; but a normal person can better look himself in the face if he gives his affection to a human being or to a job instead of wasting it on a dumb animal.

6. *Believe in human nature.*—No doubt you have loaned money to friends who have never paid it back, and, worst of all, do not care to pay it back. No doubt you have done many kindnesses to others which they repaid with meanness or infidelity. Well, we are all human. We all have our lapses of loyalty, goodness, and integrity. In the totality of human relationships, however, human nature is pretty good and very fine.

7. *Have a hobby.*—Your hobby should be one that gives you contacts with new people and new worlds. It should not be an interest in art just because you do not know anything about art. It should be a hobby for its own sake—just because it appeals to you. It should be a hobby that requires physical effort rather than mental effort. The study of philosophy is not a good hobby but the building of radios is.

8. *Have a plan for your life.*—Make a list of the things you would like to accomplish this year and next year. Have some little goals that can be achieved with ease. Put this plan on paper and, whenever you accomplish one item, cross it off, and pat yourself on the back. Throw out your chest once in a while when you do some little act that shows you are a regular fellow.

9. *Change your environment occasionally.*—Take a vacation when it is due. Go to a new part of the country. Meet some new people. Leave your wife and children at home when you take a vacation and allow them to take a vacation without you. Sell your house and buy another. Change your office furniture. Of course, you should have a den of your own, where you can litter the floor with cigarette butts and cigar bands; a place where you can put your feet on the desk and feel at home, but even a den becomes monotonous and a new surrounding is needed.

10. *Realize that you are not an exception.*—You are just about the same kind of person as the rest of the human race. Every human being has the same basic impulses and feelings. Do not worry about your heredity and do not brag about it. Just be yourself.

11. *If you have a serious mental disturbance, consider it an opportunity to get acquainted with yourself.*—When a person is physically ill, he and his friends try to find the cause and bring about health. Similarly, when a person has a serious mental trouble, we should try to find the cause and suggest curative remedies. If you should have a mental trouble, look upon it in the same way that you consider your bodily ills. Find out the cause. Study your past history. Do not try to forget it or to avoid thinking of it. Write down the symptoms and the positive methods of discovering the origin and the cure. Remember the basic formula of the psychoanalyst is, "Do not use your will—understand the *cause* of your trouble." To do so will enable you to get acquainted with yourself. If you must be treated, go to a reliable psychiatrist in the same hopeful attitude that you approach the physician for treatment of an infected tonsil.

Projects.

1. To realize how energy may be dammed up, conduct this experiment. Have a person time you for ten trials of thirty seconds each. During each trial make the figure 5 as rapidly as you can in the usual manner of making a 5. Then make the figure 5 in an inverted manner as rapidly as possible for the same number of trials and the same number of seconds to each trial. Then make the 5 right side up as rapidly as you can for about five trials of the usual thirty seconds each. Do not allow more than ten seconds rest between any of the trials. Plot a curve of the number of 5's made in each of the 25 trials.

Note the waves of efficiency and the release of the dammed-up energy.

2. In Dr. G. V. Hamilton's study of "What Is Wrong with Marriage," published by A. & C. Boni, he asked 200 normal, intelligent married men and women the question: "If by some miracle you could press a button and find that you had never been married, would you press the button?" Thirty-five per cent said "yes" or hesitated.

Why do some married people fail to find complete happiness in marriage? List the psychological causes of incompatibility. Would companionate marriage be of real value? Prepare a set of rules for the young man or woman to use as a guide in choosing a life partner.

3. Some business men have a "check-book complex." What experiences may cause them to evaluate abnormally many personal acts and plans in terms of cost and profit rather than in terms of happiness?

4. The assistant head of a department was asked to give a talk on an academic subject over the radio. He gave it without consulting the department head. When the latter learned that he had been denied this opportunity for publicity, he discharged his assistant. Analyze the possible reasons for discharging the assistant.

5. Prepare a set of suggestions for parents which may be of value in preventing psychopathological conditions in children.

6. Analyze your behavior for evidence of inhibitions that are annoying and irrational. Can you think of experiences that caused them? Mention some things that your "censor" does not allow you to do.

Part II

PREDICTING THE BEHAVIOR OF THE INDIVIDUAL

Chapter VII

The Pseudo-Scientific Methods of Analyzing People

WANTED.—A first-class man with experience, for permanent position on staff of Vice President to shape and direct the advertising policy of a trunk line railroad. To save time and trouble for both applicant and employer, kindly send in photographs—1 full length, 1 exact profile view (bust), and 1 front view (bust), full face, holding hands close in front of body, one palm outward and other palm inward. Call for recommendation and personal interview will come later.—"Vice President," Box 16, ——.

The above advertisement and others of a similar nature have appeared from time to time in business publications. Many business men think that it is possible to analyze a stranger according to his physical characteristics and accurately to predict whether the stranger is able to sell goods, pay his bills, understand music, work hard, etc. Hundreds of executives who are competent in their own fields still think that psychology is largely a study of facial or other bodily features. Students in modern universities who take their first course in psychology are often disappointed when told that all scientifically trained psychologists are unanimous in denouncing as fallacious the analysis of character from facial features.

Certain men and women who call themselves psychologists go from city to city and lecture on "applied psychology." They advertise their magical powers widely, and most newspapers are willing to give them some publicity. Occasionally some of these itinerant psychologists overstep the mental field and try to cure physical ills, after which a few, but a very few, find themselves in legal difficulties and land in jail.

Some of these traveling psychologists are sincere in their efforts to help others. They believe that they can diagnose and prescribe for the ills of people. Most of them, however,

consider their work a game and want merely to make money. However, the desire to make money by lecturing on psychology is not objectionable. The chief objection is the fact that such men are not properly trained for their work. The methods of these lecturers and allied analysts of people are of several varieties. We shall call them the pseudo-psychological methods:

1. Phrenology.
2. Character analysis (physiognomy).
3. Graphology.
4. Miscellaneous types: numerology, vibrations, astrology, palmistry, and others.

Phrenology.—The discussion of behavior patterns and brain action may have given the reader the erroneous impression that the whole brain is divided into various areas and that each area controls one function or a group of functions, such as memory, attention, etc. Such a theory was held for many years, but has been discarded. It is true that physiologists have found that definite parts of the brain do function in a few mental and motor acts, but the number of these known areas is far smaller and less important than assumed.

In the latter part of the eighteenth century, the upper classes, particularly those of the court, were interested in anatomical dissections. It was during this period that the surgeons made some important discoveries, such as the circulation of the blood. Where a portion of the brain had been removed and the exposed surface stimulated, it was noted that certain muscular movements followed. The surgeons then mapped out parts of the brain surface and guessed at the remainder. Gall and others concluded that each trait of character, such as vice, love of mate, mathematical ability, etc., had its own area or pigeonhole in the brain surface. They also made a second erroneous assumption when they thought that increase in the use and ability

of an activity, such as mathematical study, increases the size of the area. The third assumption was that these growths in function and area push out the skull and that the topog-

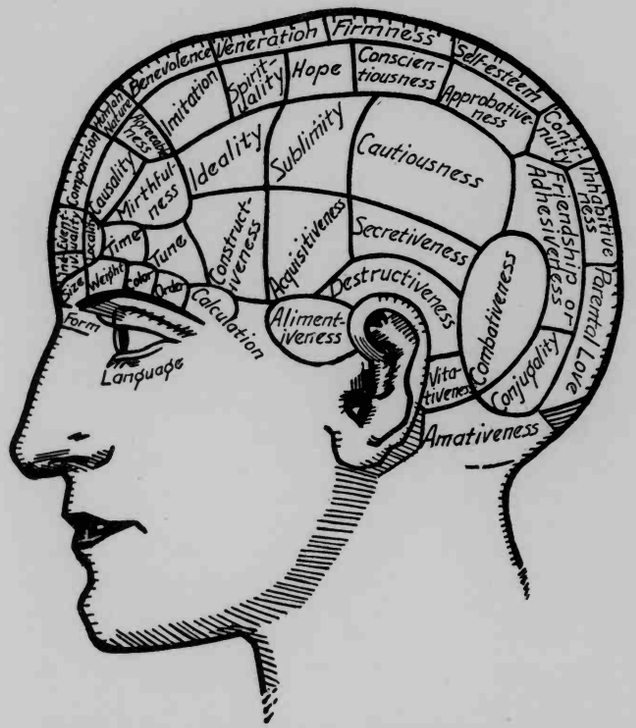

Fig. 11—This copy of an old chart of the topography of the skull illustrates the teachings of the phrenologists who thought that the brain had areas that controlled abstract traits. We now know that this scheme of analyzing character is wholly false.

raphy of the brain could be analyzed from the protuberances of the skull surface. Since then we have found that all these assumptions are wrong. The brain has only a very few areas that are known to control definite activities. In-

creased ability does not show in the enlargement of the nerve structure but is found in the complexity of nerve action. Synapses do not make the nerve fibers any larger. They might even tend to make them smaller. Large heads do not necessarily indicate large brains. The large head may mean that the individual has unusually thick layers of bone in his skull. The brain does not fit the skull closely, because it is enveloped in three membranes. In the space outside these membranes is a watery fluid. There is room, therefore, for the brain to move a little within the skull. If a man stands on his head, the brain moves toward the top of the skull; and, when he again stands upright, his brain slowly sinks back to its usual position.

Daniel Webster was wont to point to the fact that the average head size of women is smaller than the average head size of men. He used this as a proof of the inferiority of women as compared with men. Webster also used himself as an example of intelligence, because he had an unusually large head, but he did not have an unusually large cranial capacity. His brain was examined after death and it was found that the brain was disproportionately small in comparison with the size of the skull.

The gross size of the brain does not correspond with intelligence or ability. In Bischoff's tables of one hundred fifty-nine brains, each weighing more than sixty-one ounces, there was only one learned man, but thirteen criminals. The heaviest two of these brains were those of a mechanic and a day laborer.[1]

Doctor Sims tabulated the weights of a large number of brains of distinguished and other men. Thackeray's brain weighed less than 58 ounces; those of Daniel Webster, Agassiz, and Napoleon ranged from 53.6 down to 50 ounces. The brains of the historian Grote, the scientist Bertillon, the great Frenchman Gambetta, and the scientist Liebig ranged from 49.9 down to only 40 ounces. But Doctor

[1] According to Dr. Louis Casamajar as reported by Keene Sumner, "You Can't Judge a Man's Mind by the Size of His Hat," *American Magazine*, 1923. This article is an excellent popular discussion by a distinguished neurologist.

Sims [2] furnished another list by way of contrast. It included one hundred and twenty-five persons who were idiots, imbeciles, criminals, or persons of ordinary intelligence, yet all these brains were larger than those of the distinguished men in the above list.

For example:

	Ounces
Rustan, a workman	78.3
Dwarfed Indian squaw	73.5
Weak-minded illiterate	71.3
Congenital imbecile	70.5
Idiot	59.5

Many other cases have been found where the brains of idiots and imbeciles have weighed far more than the brains of great men, such as Napoleon and Webster. One of the largest brains that has ever been found was that of a London newsboy who was almost an idiot and whose brain weighed eighty ounces. Dr. Louis Casamajar, Professor of Neurology at the Columbia University College of Physicians and Surgeons, states that, if a half dozen brains were placed in a row before him, it would be impossible to tell which brain belonged to a man of great intellect and which to an imbecile.

We are led to believe, therefore, that neither size of brain area nor gross size of brain corresponds with functional capacity, but rather that other factors, possibly the complexity of structure and chemical and molecular action, determine character traits and types of ability. The phrenologists are unable to point to any objective measurements that show a definite correlation with their maps of the skull. They do advise people to enter law, medicine, or art; and when asked to support their claims they simply point to the dogma of some other phrenologist or mention one or two cases of individuals whose heads *happen* to agree with their theory.

Character analysis from observation of physical features.—The main features which the character analysts

[2] *Ibid.*

consider in the analysis of a stranger are color of the hair, color of the eyes, color of the skin, shape of the head, size of the head, profile, hardness of the muscles, shape of the body, texture of the skin, expression of the face, and condition of the clothing. The following sentences quoted from a book on this subject indicate the type of teaching:

A forehead high in the crown shows benevolence, veneration, firmness, tenacity of purpose. Fullness in the middle third of

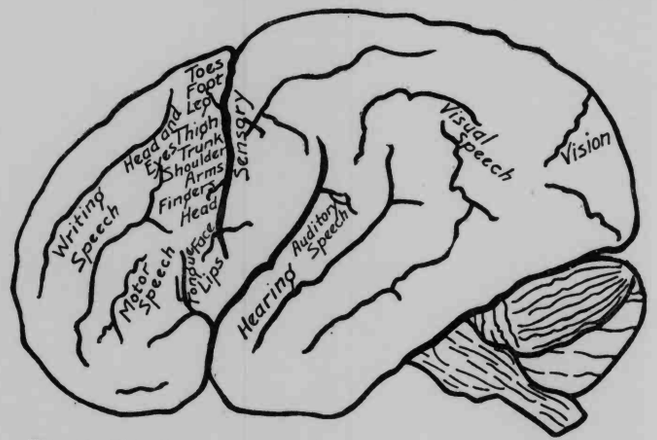

Fig. 12—This diagram presents the more recent and accurate findings of modern brain studies. The outer part of the brain has only a few known functional areas. We know the specific functions of less than one-third of the outer brain. The few known functional areas deal with sensory and motor experiences and not with personality traits, like self-esteem or amativeness. The brain probably acts as a whole in most complex forms of behavior.

the forehead indicates knowledge of human nature, keen comparative and reasoning power, a desire to connect cause with effect. Full upper forehead usually indicates a good talker of the flowery type, but not a close reasoner.

Hollow temples show an inclination toward pessimism.

Knotted brows indicate the abstract thinker.

Many books have been published which purport to explain reliable systems of character analysis and many executives have bought such books and believed them. Let us

see what a few scientifically conducted experiments have shown.

One of the leading character analysts stated: "The blond is found in large proportion among speculators, promoters, organizers, advertising men, traveling salesmen; while the more stable and constant brunet predominates among the plodders, the planners, the scientists, the administrators, and the conservators."

Mr. H. G. Kenagy asked each of about forty sales managers to select his four best salesmen. These executives then rated their men on the traits that are alleged to be associated with either blond or brunet. The final number of salesmen rated was 152. Of the 152 best salesmen, 82 were brunets and 70 were classed as blonds. Kenagy also found no significant difference between blonds and brunets in their possession of blond and brunet traits, as shown by the following table:[3]

TABLE XII

	Per Cent Possessing Traits	
Alleged Blond and Brunet Traits	*Blonds*	*Brunets*
Blond:		
Positive	95	90
Dynamic	68	64
Driving	64	66
Aggressive	87	88
Domineering	29	24
Impatient	40	41
Active	94	91
Quick	68	67
Hopeful	91	85
Speculative	39	37
Changeable	35	33
Variety-loving	48	47
Brunet:		
Negative	3	6
Static	13	13
Conservative	35	50
Imitative	39	40
Submissive	14	17
Cautious	43	49
Painstaking	74	63
Patient	57	50

[3] Laird, Donald A.: "The Psychology of Selecting Men," p. 130, McGraw-Hill Book Co., 1927. After Kenagy.

TABLE XII *(Continued)*

Alleged Blond and Brunet Traits	Per Cent Possessing Traits	
	Blonds	*Brunets*
Plodding	26	30
Slow	6	17
Deliberate	43	47
Serious	70	70
Thoughtful	77	80
Specializing	68	59

One character analyst claimed that the brunets are far more religious than the blonds and stated: "If you will go to any church in your community and count the number of blonds and brunets, you will find that the brunets outnumber the blonds, five to one. The brunets pay the bill for running the churches." To test the theory, a count was made by several investigators who stood at the doors of 69 churches in one city and classified the worshipers on the basis of hair color.

The principal conclusion of the observers was that, if the count was made in a Swedish Lutheran church, a predominance of blonds was found. If in a Catholic church in an Italian district of the city, the brunets predominated. Otherwise there was no preponderance of brunets when their number was compared with the percentage of brunets found in the general population of that city.

J. E. Walters and G. C. Brandenburg made a study of 100 seniors of the engineering school of a university to find the relationship between color of hair, color of skin, and profile with rated traits of leadership, and initiative. They could find no constant relations.[4]

G. E. Cleeton and F. B. Knight made an intensive study of thirty persons wherein they measured thirty-six physical characteristics with exact anthropometric instruments. The traits studied were:

Sound judgment.	Ability to make friends.
Intellectual capacity.	Leadership.
Frankness.	Originality.
Will power.	Impulsiveness.

As a result of careful measurements and involved statistical evaluation of the data, they found that almost one-half the correlations were negative and the mean correlation was only 8 per cent better than chance.[5]

Many pages of data might be quoted from investigations that have been made in the study of the relation between physical and mental traits. No single study of the character analysis variety has resulted in evidence that predictions on the basis of bodily features are appreciably better than chance.

In spite of the scientific evidence against it, some men persist in their conviction that they, at least, can analyze people from their features. On several occasions, the writer has arranged for a special meeting of business men at which they attempted to analyze students for whom objective evidence of ability was available. The business men were told in advance that no character analyst analyzes people on the basis of physical features, such as color of eyes, shape of nose, prominence of chin, shape of mouth, distance between eyes; but rather according to the clothing and conversation of the person analyzed. The analysts were challenged to analyze strangers whose differences in clothing and conversation had been removed or disguised.

In one such demonstration, 88 members of the sales and advertising division of a chamber of commerce attempted to analyze a group of college students whose hair, clothing, and hands had been standardized. Only the faces were visible. The result was that the business men could not select the most intelligent or least intelligent member of the group, nor could they judge any other trait except with purely chance results. Some of the members of the judging group were sales managers who claimed that they could hire

[4] Brandenburg, G. C.: "Do Physical Traits Portray Character?" *Industrial Psychology*, September, 1926, pp. 580ff.

[5] Cleeton, G. E., and Knight, F. B.: "Validity of Character Judgment Based on External Criteria," *Journal of Applied Psychology*, June, 1924, pp. 215-231.

salesmen by the shape of the face and the forehead. The resultant data indicated that these "experts" could have done just as well if they had turned their backs to the persons whom they analyzed and then written down their rankings in random order. The students who took part in the experiment were not selected by the writer with any attempt to choose those who would be likely to be misjudged. All the students of an advanced course in psychology were asked to assist in the experiment and fourteen appeared at the appointed time.

Figure 13 shows photographs of the fourteen students who were rated by these business men. All the students had their clothing and hair covered with uniform covering so that their sex was not evident and only three out of 88 business men judged correctly the sex of all the disguised students. The 88 business men were asked to designate the student who spent the greatest amount of time in study. Previous to the experiment, the 14 students had kept records for four weeks of the number of hours spent in study. The rankings of the business men correlated with the rankings of the students' records —.29. This might indicate that the group judgments of the business men were slightly better than chance. However, the probable error of the correlation was ±.16. This probable error is more than one-fourth the coefficient of correlation, hence, the group estimate in this respect had no predictive value whatsoever.[6]

The business men were asked to make the following selections from the group: the student with the most beautiful profile; the student with the best leadership record; and the student with the highest intelligence. The girl who was selected as having the best profile was also selected as having the best leadership record and the highest intelligence, whereas she stood near the bottom of the group in intelligence and leadership. The one chosen as having the lowest intelligence of the group was actually fifth from the

[6] If the reader is unacquainted with the meaning of the coefficient of correlation, he can refer to Chapter XXIV for an explanation.

Fig. 13—Examine these pictures of college graduates who have been dressed in similar clothing. Classify each as to sex. Arrange them in order of merit according to what you think their scholastic record was while in college. Select the two least talkative of the group. Then refer to the Appendix for the correct answers.

INTENTIONAL SECOND EXPOSURE

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top. The two least talkative students were selected as the most talkative.

The photographs of the fourteen students of Figure 13 were taken without any head covering. If the ears of the boys had been pressed closer to their heads, the reader would have difficulty in discriminating between the boys and the girls. All the fourteen students photographed are college graduates and of above average ability. Two of them made outstandingly high scholastic records. One of these two has already demonstrated exceptional business ability. The reader is asked to:

1. Look at the photographs and select the two outstandingly good students.
2. Classify each of the fourteen as to sex.
3. Then arrange the fourteen in rank order according to their scholastic record while in college.

The Appendix will give the key to their records.

The reader may be a believer in character analysis from observation in spite of the statements presented here. He may have certain convictions which he has obtained in emotional situations, and it may be difficult for him to ignore his old neural patterns and to adopt a new set. The answer is that, if any one believes in character analysis and wishes to get at the truth of the situation, he must conduct some experiments where he keeps accurate records and makes analyses of a large number of unselected individuals. Such an investigation would probably convince him. He should consult other psychologists, who are associated with a university faculty, and learn their opinions. It is important to mention that psychologists of the faculty should be consulted and not merely faculty members because some college professors of chemistry, physics, languages, and other nonpsychological subjects do believe in character analysis. Let us now consider some of the factors that have erroneously convinced the general public of the value of character analysis.

Why people have accepted character analysis.—1. Literature may give a person the impression that mental traits are indicated by the face.

Julius Cæsar, I, ii:
Yond Cassius has a lean and hungry look;
He thinks too much.
Midsummer Night's Dream, III, ii:
So should a murderer look, so dead, so grim, . . .
Yet you, the murderer, look as bright, as clear,
As yonder Venus;
All's Well, II, i:
A traitor you do look like.
All's Well, V, ii:
He looks like a poor, decayed, ingenious, foolish, rascally knave.

The moving picture show and theater also suggest that certain physical or outward characteristics are associated with mental traits. We have a typical villain, hero, miser, banker, college boy, etc. Many popular magazines publish articles on the pseudo-scientific methods of analyzing people which, to the uninformed, give the impression that such methods are sound.

2. The character analysts are better advertisers than the psychologists. The academic psychologists are scientists who receive their pay from institutions of learning. It is not necessary for them to advertise their abilities. The pseudo-psychologists must obtain their incomes by appealing to the fringe of the public that is looking for something new and immediately helpful. The scientific training of the university develops cautiousness on the part of the student of truth. Truth is not suddenly or easily captured. It is easier to find the things that are not true than to find the things that are true. To the general public, the true psychologist appears to be negative. He often tells what is not sound, but does not always offer a better system to take the place of the colorful and alluring promises of the itinerant psychologist. This situation of the helplessness of the scientist, in that he cannot offer a panacea, much as he might like to do so, is annoying to the layman. But that is the price of sound progress in many situations.

3. The systems of the pseudo-psychologist appear to be plausible. He goes into minute detail as to the various characteristics that indicate certain traits. When a stranger listens to the lecturing analysts and reads their books, he is impressed with the detailed analyses which they appear to make. The only sad part of their analyses is the fact that they are not true. And the reader, who has not had training in conducting careful experiments to find out a few simple facts, assumes that the minutiæ of the itinerant lecturer are real evidence.

4. The systems of the pseudo-psychologists are easy to learn and to apply. The typical lecturer shows the audience the picture of George Washington and then says: "Now, ladies and gentlemen, we have here a man with a sloping forehead, who was also unusually aggressive and persistent. How many of you can think of some man who is unusually aggressive and has a sloping forehead?" A large part of the audience will raise their hands and think that they have learned something that they suspected but of which they were not sure.

5. Their predictions deal with generalities that apply to all members of the population. Science has demonstrated that as human beings we all have the same traits, but that we differ in the extent to which we have any one trait. Qualitatively, we are the same; quantitatively, we differ. Hence, when the analyst tells a stranger that he is ambitious but not so ambitious as he might be, he has merely stated a generality that applies to a very high percentage of the human race. If the analyses of character analysts are read with care, it will be noticed that the findings are of a generalized variety that applies to practically all people. The true psychologist measures the degree or extent to which the person has a trait instead of judging by the presence or absence of the trait.

Statistically considered, many of the statements of the analyst are certain to be true. One lecturing pseudo-psychologist claimed that he could teach prospective parents

how to predetermine the sex of the unborn child. He charged a fee of $50 for the formula and guaranteed to pay the parents $55 if the child should be the opposite of the sex desired. This scheme was bound to make money for the schemer, in spite of the fact that his formula was the hocus-pocus of the primitive medicine man. Approximately one-half the babies are male and one-half, female. Hence, any scheme of predetermining sex will be correct in about 50 per cent of the cases. If he sold his scheme to 100 parents, he received $5,000. If he returned $55 for each of fifty failures, he still had a gross profit of $2,250.

6. The systems of analysis are flexible. The novice is told to apply the new system at once. If he makes a serious mistake in a "reading," he is told that he failed to balance the variables properly. Moreover, he can squirm out of an error, if he is just slightly ingenious in suggesting another interpretation.

7. The pseudo-analysts use fallacious reasoning. They tell their audiences and readers of the great men who believe in character analysis and have been benefited by it. Many of these famous characters may have been dead for a generation or two, but they are still offered as evidence of acceptance by great men. The general public does not realize that the discovery and knowledge of truth is a progressive and contemporary task, and that the testimonials and axioms of a generation ago may be questioned to-day.

Errors in logic are committed by reasoning reciprocally. It is true that most mental defectives have poor teeth. Deformities of the palate have been found in 82 per cent of mental defectives, in 76 per cent of epileptics, and in 80 per cent of the insane. But these findings do not allow us to reason reciprocally and say that, if a person has bad teeth or a deformity of the palate, therefore he is feeble-minded, epileptic, or insane.

They also present isolated cases to prove their theories. The lecturer says that long fingers indicate artistic ability. He presents the picture of an artist who happens to have

long fingers and assumes that one or two cases prove a principle; but he never gives data, which proves, by actual measurement, that the fingers of artists are longer than the fingers of those who have no artistic ability. The true scientist must make painstaking measurements, tabulate the results, treat the data with required statistical formulas, and then probably look for more evidence before he feels safe in claiming more than a hypothesis.

Any one who wishes to become a successful pseudo-psychologist can do so:

> Surely the technique is clear—and the answer. Promise what the man in the street and his feminine counterpart desire, satisfy in dogmatic and alluring statements their hopes and dreams, tell them confidentially that, after all, they are right and sound and the [other] professors crazy, lazy, and aloof—and you have them in the hollow of your hand.
>
> Never contradict, except to raise the ante; never deny the possibility—no, the probability of the realization of the wildest of wild dreams; point to yourself as a marvel who has risen from decrepitude to the heights of success through the utilization of the very means you are exploiting; flatter, pet, praise and do it all genially—and the mob is yours. Don't tell the truth; it hurts and disillusions. Feed the emotions, not the mind.
>
> In other words, know the weakness of your fellow-man, know his hopes, and then pound home the dogmatic shout that what he wants is his—and that you, who have suffered even as he has, are the way, the truth, and the life.
>
> I have seen them break into cheers, weep, rush to embrace the lecturer, pour their troubles on his too-willing ears (for he can pass them on to those who follow him) and then, the really important thing, sign them up for a highly expensive course of private lectures. For be it understood, one catches the mass by first giving free lectures, advertised far and wide. These free lectures merely hint at the wonders of the others—but sufficiently so to draw subscribers.[7]

What is the answer? Should the scientifically trained psychologists attend the lectures of the itinerant psychologists and denounce them publicly? No, that would merely give the lecturers a chance to get some desired publicity. And the general public, being unacquainted with the facts, would judge on the basis of their emotions and decide that the university critics are merely prejudiced because somebody else is getting the publicity and the money. In the long run, the present procedure of appealing to the intelligent elements of the population—students, business men, executives, and intelligent readers—is the better plan. Education will do more than warfare.

[7] Leary, Daniel Bell: "Itinerant Psychologists," *Industrial Psychology*, June, 1926, pp. 396-398.

Graphology and other pseudo-scientific methods of analysis.—Graphology, like physiognomy, impresses the layman, because most guesses are apt to be more or less true. As previously stated, we all have the same traits but differ in the extent to which we have them. This being true, the person whose handwriting is being analyzed thinks that he is learning something new when he is told that he has certain traits. Any true analyst must do more than say that the subject has specific traits—he must show to what degree the traits are present.

Analyses of handwriting are based on analogies rather than on sound research. If the reader will examine several books on graphology, he will find that the predictions are of the type quoted:

> Two or more slopes of the letters indicate moodiness.
>
> If the writing is shaded for effect, it indicates affectation.
>
> If the endings of words ascend very high, the writer "lives in the clouds."
>
> Square writing indicates mechanical ability.
>
> If the cross of the "t" slopes upward, ambition is evident; if downward, pessimism and gloom.
>
> Large letters indicate a spendthrift nature with optimism dominant.
>
> Small letters indicate secretiveness.
>
> If the first strokes of M, N, U, and W are very high, the writer possesses pride.
>
> If the lines run below the basic line, the writer is easily discouraged and becomes despondent.
>
> If the lines have an upward slope at the beginning and a down-

ward slope at the end, such a person promises much but does not keep his promises or his appointments.

Several able scientists have made studies of the value of physiognomy and phrenology, but none has studied the predictive potentialities of handwriting. So far as now known, a person cannot be accurately analyzed on the basis of his P's and Q's. Of course, several men have made excellent studies in identifying individual handwriting and in diagnosing mental disorders, but such investigations are of little or no value in predicting ability, honesty, initiative, morals, etc. We shall have to wait until someone can take the time to spend several years in making valid discoveries in the field of graphology.

Concerning palmistry, astrology, Hindu philosophies, numerology, vibrations, spiritualism, and others of their like, we must allow the psychoneurotic and the uninformed to dabble in them. These cults seem to satisfy the inner cravings of the weak and maladjusted, who wander from one cult to the next only to find that they attain what they want for a short time and then must try some other "system." These cults and "philosophies" are a means of evasion of the difficulties of life. They offer a prompt and immediate answer to the poorly adjusted neurotic. If he would only realize that the facing of problems by matter-of-fact methods will bring the only lasting results, he would be vastly better off. All these last-named schemes for analyzing people or guiding them are considered unsound by the students of modern science. So far as the business man is concerned, the less attention he pays to them the more time and effort will he have to devote to valid methods of studying human behavior.

Projects.

1. Obtain copies of several inspirational magazines and clip the advertisements of pseudo-analysts of character. Write to them for descriptions of their "systems." Then analyze their methods for their worthwhileness.

2. Collect a list of the names and addresses of character analysts whose methods are very questionable.

3. Ask several friends to rank in order of scholastic ability the fourteen college graduates whose photographs are presented in this chapter. Compare their rankings with yours. Ask the raters why they ranked them as they did.

4. Collect handwriting specimens of persons whom you know. Analyze the writing according to the system of analysis presented in a book on graphology. Estimate the value of the system.

5. Read an article by an astrologer and analyze the predictions for their generalities and worth.

CHAPTER VIII

Extending Credit

An experiment in "psychic waves."—A certain college professor met a young and new instructor at their faculty club. They developed a slight friendship. One day the instructor asked the professor to introduce him to a banker so that he could borrow some money. It happened that the professor had had a young man in one of his classes who went to work for a local bank and had obtained a position of minor executive importance. The professor took the instructor to the bank and introduced him to the young banker. They chatted for several minutes, but the bank executive refused to extend the loan, even though of a comparatively small amount. The professor then took the instructor to the Morris Bank of the town and indorsed a note for the instructor.

When the note fell due, the instructor neglected to pay it. In fact, he refused to pay it or to take any interest in the matter. As a result the professor had to pay the money to the bank.

Shortly after the professor had taken the instructor to his former student, the professor asked the young bank executive why he had refused a loan to a member of the faculty of his alma mater. The banker said: "I don't know why I didn't lend him the money, but he just simply didn't look right to me." And the young banker happened to be right.

The question of special interest to the business psychologist is, "Why did the young instructor appear to show his true character to the banker and not to the professor?" Both the professor and the banker were of approximately equal intelligence. Had the banker acquired the art of

"reading the minds" of customers? Would this statement of an experienced credit man explain the skill of the one and the lack of skill of the other?

> Not every man has a head for mathematics, and not every man has a sense of logic necessary for the practice of law. Just so, not every man has what I might call the "sixth sense" necessary to judge what I truly believe is a series of psychic waves which flows from one man to another when in conversation.[1]

Psychologists have been unable to find anything that would correspond to "psychic waves." Scientists are inclined to discard that theory. It is possible, but has never been demonstrated in the laboratory, that the facial expressions, general bodily movements, bodily posture, and changes of pitch, intensity, rapidity, and inflection in the voice are noted by those who have daily contacts with people and analyze their motives. Some executives have said that they tend to suspect the man who makes a statement and then leans back. Others have claimed that, when a lie is told, the speaker catches his breath. Salesmen say that they know when the prospect is sold by the fact that he leans toward the salesman. The writer decided to test the theory that experienced interviewers can detect false statements more accurately than inexperienced interviewers. Arrangements were made to have 11 experienced credit men and 14 experienced employment interviewers, 18 inexperienced men students and 7 inexperienced women students interview several hundred college students. These students who were to be interviewed were instructed to answer all the questions that any interviewer might ask, but to answer some truthfully and some falsely. The interviewers had the privilege of cross-examining the students.

The questions varied in nature, but were of the kind that would be answered in a definite manner, such as, "How old are you? How long have you been in college? How much money did you earn during your summer vacation? What

[1] Tregoe, J. H.: "Can You Tell if a Customer Will Pay His Bills?" *Printers' Ink Weekly*, July 1, 1920, p. 141.

were your grades in your college courses last semester?" Both the interviewer and the interviewed kept a written

TABLE XIII

Kind of Interviewers	*No. of Interviewers*	RIGHT *True Answers Judged True* No.	%	WRONG *True Answers Judged False* No.	%	RIGHT *False Answers Judged False* No.	%	WRONG *False Answers Judged True* No.	%	*Per Cent That Were Wrong*
Experienced Credit Interviewers	11	339	50	128	19	109	16	101	15	34
Experienced Employment Interviewers	14	433	42	205	20	164	16	223	22	42
Inexperienced Male Student Interviewers	18	487	48	204	20	179	18	145	14	34
Inexperienced Female Student Interviewers	7	188	38.5	110	22.5	68	15	122	25	47.5
Totals	50	1447	45	647	20	520	16	591	19	38.6

TABLE XIV

Experienced Employment Interviewers	RIGHT *True Answers Judged True*	WRONG *True Answers Judged False*	RIGHT *False Answers Judged False*	WRONG *False Answers Judged True*	*Per Cent That Were Wrong*
Mr. Amos	24	8	18	16	36
Mr. Babbitt	38	8	9	18	36
Mr. Cabbage	54	13	0	18	36
Mr. Dandy	41	7	1	16	35
Mr. Elmer	10	16	9	16	63
Mr. Farmer	38	11	0	11	37
Mr. Garnet	43	12	27	9	23
Mr. Hamlet	45	19	10	15	38
Mr. Indian	14	20	16	10	50
Mr. Jeremy	31	26	20	20	47
Mr. Kamera	36	21	7	14	45
Mr. Lima	24	7	27	28	41
Mr. Merry	34	20	14	16	43
Mr. Notz	51	17	6	16	37
Totals	433	205	164	223	
Credit Interviewers					
Mr. Orchard	33	13	3	16	45
Mr. Pear	17	17	2	8	57
Mr. Quince	23	6	4	5	29
Mr. Rote	27	3	7	5	19
Mr. Sing	44	4	7	20	32

TABLE XIV *(Continued)*

Credit Interviewers	RIGHT *True Answers Judged True*	WRONG *True Answers Judged False*	RIGHT *False Answers Judged False*	WRONG *False Answers Judged True*	*Per Cent That Were Wrong*
Mr. Toast	34	6	11	8	24
Mr. Union	40	5	14	7	18
Mr. Visitor	15	18	17	4	41
Mr. Wisdom	38	15	18	8	29
Mr. Xylof	41	14	6	13	36
Mr. Youth	17	27	20	7	48
Totals	339	128	109	101	

record of the questions and the answers, so that it was possible to record the interviewer's accuracy in judging the answers to each question. Records were tabulated of the interviewer's estimates of 3,205 questions. Table XIII presents the results of the four classes of interviewers: the experienced credit men were wrong in 34 per cent of their judgments; the employment men, in 42 per cent; the inexperienced men, in 34 per cent; and the inexperienced women, in 47.5 per cent.

Table XIV presents the tabulation of the judgments of each of the 25 experienced interviewers. As can be noted from the table, some of the interviewers were better detectors of false statements than others. The experiment indicated the following points of note:

1. The experienced interviewers were unable to detect false statements when the "applicant" wanted to lie. His detection was largely a matter of chance. The results did not indicate that experience in interviewing gives a person an extra power or "psychic wave" sense in judging the truthfulness of statements made by others.

2. An interviewer should depend upon records and objective information in evaluating statements of applicants rather than upon his "hunches" or "feel" or "atmosphere" or the movements of lips and hands. One interviewer claimed that he could detect false statements from the movements of the lips. The results showed that he was one of the poorest interviewers in the group.

Credit men should depend upon the records of the credit

bureaus for guidance rather than upon the impressions made by the applicant's personality. Similarly, the em-

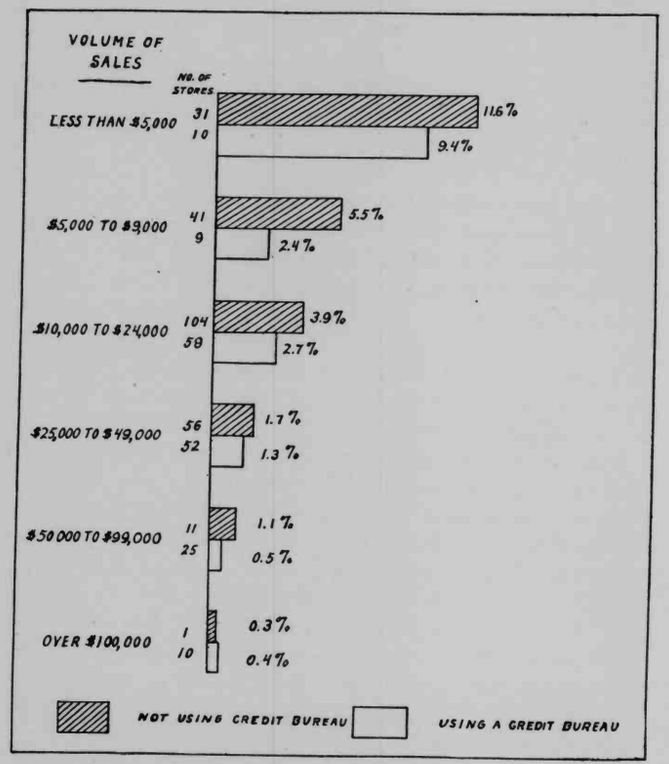


Fig. 14—Relation of bad debt losses to use of a credit bureau in 409 retail grocery stores of Louisville, Kentucky, 1928. Grouped according to volume of total cash and credit sales. The figures show the percentage of bad debts to credit sales for the stores that did not use a credit bureau and for those that did use a credit bureau. Adapted from *Domestic Commerce*, June 10, 1929.

ployment man should depend upon the statements of former employers of the applicant.

3. When interviewers depend upon their impressions, without reference to records of the applicants' past behavior, they succeed more often than they fail because the majority of applicants want to tell the truth rather than to falsify. "Worked out from 7,000,000 cases, the law of averages tells the surety companies that only one man in every hundred of those they bond in 1940 will go wrong, and, of each seventy that do get into trouble, only one will do so through deliberate criminal intent." [2]

4. The individual interviewers who made the best records in judging the statements of the students were those persons who had had previous experience in interviewing students and knew the general facts of student life. This indicates what one would expect: an interviewer should be acquainted with the facts of the type or class of people whom he interviews.

5. The individual interviewers who made the poorest records seemed to be the "fatherly" or trusting type of person who did not cross-examine the applicants. Conversely, the interviewers who made the best records were those who cross-examined the applicants, looked them in the eye, and pursued a policy of compelling the applicant to prove his statements.

6. The best of the interviewers made bad mistakes in their judgments of statements made by students who were adept in talking with strangers and who wished to baffle the interviewer. The experiment clearly demonstrated that, if a person wished to falsify his statements, the interviewer could not differentiate the false from the true unless he could check the statements objectively.

The use of instruments in credit work.—Several instruments for measuring emotional reactions have been devised. Among these is the well-known instrument of the medical man, the *sphygmomanometer*, used in readings of the blood pressure. The reading on the dial is the systolic blood pressure. In one experiment, the experimenter had persons

[2] Goode, Kenneth M., and Powell, Harford, Jr.: "What About Advertising?" p. 156. Harper & Bros., 1928.

tell true or false stories under the fire of cross-examination of a mock jury. The experimenter took systolic blood pressure readings during the experiment.[3] He was able, by means of the systolic blood pressure readings, to select 96 per cent of the "liars" from those who told the truth, whereas the "jurymen" could pick out only 48 per cent. The curves plotted from the readings and the pressure varied for those who were trying to deceive. However, the instrument method of detecting true or false statements does not prove whether a person is telling a lie, is ashamed, or is angry. It merely indicates that some emotional excitement is present.

Other instruments, such as the *pneumograph*, which indicates changes in respiration; the *sphygmograph*, which records pulse changes; the *plethysmograph*, which records both pulse and blood pressure; and the *galvanometer*, which shows deflections of electric currents by the body, have been used in various experiments to discover the characteristics of emotional reactions. In general, these techniques do show that some kind of emotional response does occur, but they do not show what kind of emotional response it is. The emotion may be one of joy, sorrow, anger, fear, or sex.

The business man who appraises credit or buys goods on the assumption that the transaction will be mutually satisfactory cannot depend upon "psychic waves" or mechanical techniques for measuring the honesty of the other party to the transaction. He should rely upon the more tangible factors of the situation, such as the past record of the applicant in credit relations, statements of mercantile agencies of national scope, local rating or credit associations, trade associations, banks, collection agencies, reports of other firms who have dealt with the applicant, and financial statements furnished by the applicant.

The credit man, in most cases, learns how to evaluate

[3] Marston, W. M.: "Systolic Blood Pressure Symptoms of Deception," *Journal of Experimental Psychology*, vol. 2 (1917), pp. 117-163.

these concrete evidences of *Character*, *Capacity*, and *Capital*, the "three C's" of credit relations. He learns how to determine the proper ratio between quick assets and quick liabilities. A machine tool supply house might be a good credit risk with a 2 to 1 ratio, while a clothing store might be a poor risk with a 3 to 1 ratio. He studies the financial statement to uncover the facts back of the statement. He wants to know how the audit was made and by whom. Notes from stockholders, goods on consignment, pledged accounts receivable, pricing of inventory, notes payable to bankers, unpaid taxes, salaries of officers, and many other facts are studied by the experienced credit man who must extend credit to certain types of businesses. Most experienced credit executives depend upon the facts that can be discovered regarding the applicant rather than upon the impression the applicant makes.

We shall not discuss the subject of credit as the accountant studies it, but rather shall deal with some of the more or less intangible factors or psychological aspects which are important in the credit field.

Extending Credit to Others

1. The attitude of the credit man.—The child psychologist knows that, when a mother requests her child to do anything, the attitude and manner of the mother will influence the child's conduct. If she commands the child in a tone of voice and with a facial expression that cause the child to feel that his obedience is expected rather than hoped for, the child will obey. The principle applies to the credit man. When credit is asked for, the credit man should explain the company's terms in a clear manner and leave the impression with the applicant that the company expects obligations to be met. Some credit men overexert themselves to impress the customer that he must pay for goods bought and send the customer away with a feeling of ill will toward the company. Later on, he will transfer

his business to concerns that are what he calls "human." The impression left with the customer should not be that the company wants its pound of flesh, nor should it be that credit is easy and that the customer may take as much time as he wishes. Salesmen tend to take the latter attitude, and, later, the customer resents the importunities of the credit department, because the attitude assumed by the salesman is not the same as that of the credit department.

The credit man should, in some concerns, occasionally take a trip with the salesmen and demonstrate the proper attitude to be developed in the customers. Usually the salesman's manner toward the customer makes the customer feel that the "company is darn glad to get the business," while the credit man's manner tends to give the customer the impression that the company is doing him a favor by allowing him to carry its line or to use its products. When the customer feels that he is doing the company a favor by being a customer, he tends to take more time in meeting his bills. The feeling between salesman and customer and between company and customer should be one of mutual dependence. The credit man may be able to promote this feeling more readily than the salesman.

When the credit man goes on the road it is essential that he refrain from becoming too much of a good fellow. Credit men often entertain their big customers and they seem to think that friendship is increased when the credit man and the customer take part together in some form of dissipation. The contact should be one of friendliness, but it should never be more than business friendliness. With this relation between the two, the credit man can talk in a friendly but firm tone when the customer is tardy.

The debtor will pay his bills more promptly to those whom he fears or to those whom he likes. The use of fear is dangerous, because the customer will not give future orders to those firms whose attitude he fears; but he will tend to pay those whom he likes, and, when business is

again good, he will come back for more trade. The following letter illustrates the use of humor and leaves a better "taste in the mouth" than threats of collection agencies and bankruptcy proceedings.

When I was a kid my mother taught me to remember things by tying a piece of string around my thumb. This worked fine.

I am inclosing a piece of the kind she used, of proper length for you, and I am going to ask you as a favor just to tie it around the middle of the thumb on your right hand. You will soon see how conveniently and reliably it operates.

Presently, your bookkeeper will come in about some other matter. You will take the paper which he gives you in your right hand. You will at once see the string. Then you will say, "Oh, yes, Smith, I wish you would make out a check for the Packard Electric Company and let me sign it right away. There is a balance overdue."

You will be glad to have the matter settled. We will much appreciate getting the money to pass along to the people *we* owe. The string you can keep and use again for all sorts of things—possibly to remind you to send your next order our way.[4]

A public utility concern uses poor poetry to request payment of past-due accounts. Here is a poem they have used with pronounced success:

We haven't heard
A single word
From you about our letter.

A note dispatched
With check attached
Will make us feel much better.

Of course, their answers are not always pleasant, but here are two answers they received:

Your little note
Has got my goat.
How much of me's required?

My vouchers say
You had your pay
Before the time expired.

[4] McCuaig, C. B.: "The 'Human Interest' Angle the Credit Man Needs," *Printers' Ink Weekly*, June 17, 1920, pp. 162-170.

Your health to me
Is certain-lee
A thing of little matter.

If you will look
Upon your book
You'll quash the whole darn matter.
. . . . . .
Your letter was received.
It was not clever
In your asking for a check
For the bill I owe,
So I'll pay the thing "By Heck!"

It is important for the credit man to remain on friendly terms with his customers, even though the customers may be slow pay. Some credit men take the attitude that they can scare a debtor more easily when they do not know him and, consequently, do not care to be on friendly terms with him. But, as the old saying goes, "Sugar will catch more flies than vinegar." An attitude of friendliness and cooperation will often succeed where threats fail.

2. Coöperate with the sales force.—In some sales organizations, the attitude of the salesmen toward the credit department is, "We get the orders and the credit department turns 'em down." The credit department is not and should not be looked upon as a necessary evil. The function of the salesman is to show customers the value of his merchandise and the firm he represents. The credit man must sell the salesmen and the customers the function of the credit department, namely, stabilized and continued prosperity. This is good business for the customer, the salesman, and the employer. The credit man is just as essential as the salesman, and the sooner that both realize this, the better will be the work and the success of both. To achieve this cordiality between salesman and credit man, the salesman should furnish the credit man with information about his customers which will enable the credit man to evaluate the risk. The salesman must feel that calling on references regarding credit is a part of the sale.

On the other hand, the credit man must exhibit cordiality

toward the salesman as well as toward the customer. When the credit man finds it necessary to cancel an order, he should not use a plain cancellation stamp on the order and return it to the salesman. The salesman may have spent hours in getting the order, and, naturally, he will "fume" when the order is coldly turned down. The credit man should write the salesman a friendly letter and state his reasons for turning down the order. If possible to do so, the credit man should inform the salesman, in advance of his calls on certain customers, of the credit standing of those whose credit is weak. The burden of proof lies with the credit man rather than with the salesman.

The credit man can furnish the sales department with a list of eligibles for each salesman's territory and the salesmen will soon spend their time and effort on those firms whose orders are certain of approval for credit. This will reduce friction between sales and credit departments far more readily than any other method of procedure.[5]

Coöperation with the sales department means more than mere cordiality of feeling between the two departments. The credit man should give definite assistance to sales by reviving inactive accounts. In many cases this means that the credit department simply writes letters of inquiry such as, "Perhaps we offended you in some way," or, "You probably have some kind of complaint against us," or, "Just tell us what the trouble has been, and we shall endeavor to prove that the renewal of relations will be to your advantage as well as to ours." Letters of this sort are becoming stereotyped in the business world. A better plan is to classify the inactive accounts and then write them letters which offer definite commodities that will be likely to attract the former customer. One effective classification of inactive customers is on the basis of previous purchases. The man who bought a desk is more apt to need additional office supplies than the housewife who bought a dress or shoes. Saks

[5] Warburton, Jas. H.: "I Never Ask Our Credit Manager to O.K. an Order," *Printers' Ink Weekly*, Dec. 13, 1928, p. 3.

& Company of New York City used this method and sold $100,000 worth of merchandise in six weeks.[6]

The principles of direct mail should be studied and applied by the credit man if he wishes to be of material service to the sales department in the renewal of accounts.

3. The credit department, as well as the sales department, must advertise its services.—The public postpones the payment of bills, because people prefer to spend cash in hand for new desires rather than for things which are already in use. Anticipation is far more interesting than payments for old realizations. The members of several retail credit associations of individual cities have given newspaper publicity to the importance of prompt payment of outstanding bills. In the Atlanta, Georgia, campaign of this type full-page, half-page, and quarter-page

Resolve for 1929

"Always to regulate your transactions so as to pay in full each month by the

10th, OR AS AGREED."

You build the highest credit rating simply by being methodical.

You increase the esteem of those with whom you deal.

You cause the appreciation of your patronage to grow and grow.

You add to your character—you make lasting friends.

HONOR
RETAIL CREDIT ASSOCIATION
PROGRESS

advertisements were used in newspapers. Each advertisement began with the statement, "Pay up, and keep your credit good," and each ended with, "Pay all monthly bills in full before the tenth of the month." The members of

[6] Davis, G. L.: "How a Credit Department Sold $100,000 in Six Weeks," *Printers' Ink Weekly*, Jan. 17, 1929, pp. 119–128.

the Associated Retail Credit Men of Atlanta spent $2,000 for their campaign in 1923 and the results were so satisfying to the members that they appropriated $5,000 for the campaign of the following year.[7] Most persons who do not pay their bills fail to do so because of neglect or temporary inability to pay rather than deliberate intent to defraud.

Appropriations for advertising which is focused on making sales will continue to exceed the expenditures for moneys for the payment of sales. However, the better policy is prevention rather than readjustment. For this reason, the credit department can legitimately direct its activities toward the development of a definite consciousness of the importance of a sound credit policy on the part of the customers as well as the salesmen.

4. The credit man should predict his losses for classes of customers.—Many concerns know the gross percentage of loss due to credit risks. In many cases the loss is exceedingly small. The percentages vary from a fraction of 1 per cent up to those of the credit clothing stores, which are about 5 per cent. In retail credit concerns the losses can be held down to 5 per cent by following definite rules in extending credit. This loss is simply added to the mark-up of the goods.

William Goldfarb [8] presents the following percentages of losses of one of the large credit clothing store chains according to the classes of customers:

1%—School girls (minors) living at home.
2%—School boys (minors) living at home.
4%—Married women whose husbands work for six months at one place.
5%—Married men who work for six months at one place.
9%—Single girls, rooming.
17%—Couples living in housekeeping rooms.
18%—Foreigners.
21%—Professionals, known to be among the poorest risks.

[7] "Turning 'Spongers' into Regular Customers," *Printers' Ink Weekly*, Nov. 29, 1923, pp. 145–146.

[8] *Printers' Ink Weekly*, Oct. 25, 1917, p. 116. Taken from *Men's Wear*.

(By "professionals" are meant waitresses, painters, paperhangers, chauffeurs, etc.)

23%—Single men living in rooming houses.

5. The credit man must keep in close touch with the condition of each account.—Surprising as it may seem, much money is lost each year because the creditors do not promptly follow up their claims. Individuals are far more lax in their collection methods than corporations. Of the 500,000 men of New York state who were eligible for a state war bonus, 100,000 failed to apply for what was due them. Stockholders of the American Telephone & Telegraph Company lost $750,000 by failure to use or sell subscription rights offered them in May, 1926.

When a purchase is fresh in a customer's mind, it is easier for him to pay than when the account has grown old. The credit manager of Sherwin-Williams Company is quoted as saying:

> When a statement, sixty days past due, remains unpaid, the chances for collection are very good; when a statement, ninety days past due, remains unpaid, the chances of collection run about 90 per cent; when a statement, 120 days past due, remains unpaid, the chances of collection are 80 per cent; but when a statement gets to be 6 months past due, and remains unpaid, the chances of collection are about 50 per cent.

Even with the "hopeless" account, age is important. Recovery from one-year-old bad debts runs much higher than from two-year-old claims.[9]

Borrowing Money and Obtaining Credit

Few, indeed, are the business concerns that always have ample funds to take care of all debits. The lack of capital constitutes one of the main causes of failure. According to a report from Bradstreet's,[10] the causes of failure among retail merchants in 1920 were as follows:

[9] *Distribution and Warehousing Magazine*, February, 1929. Taken from "Retail Credit Practice," by John T. Bartlett and Charles M. Reed, Harper Bros., 1928.

[10] Brooker, Bertram R.: "How Retail Conditions in Canada Correspond with Those in U. S. A.," *Printers' Ink Weekly*, July 10, 1924, p. 107.

TABLE XV

Causes of Failure Among Retail Merchants	*Canada Per Cent*	*U. S. A. Per Cent*
Incompetence	20.8	32.5
Inexperience	8.1	6.6
Lack of Capital	34.1	32.3
Unwise Credits	2.4	1.6
Failures of Others	1.3	1.2
Extravagance	0.6	1.2
Neglect	2.9	1.3
Competition	0.8	1.3
Specific Conditions	18.6	14.4
Speculation	0.5	0.6
Fraud	9.9	7.0

The year 1920 was chosen because it was a year when business mortality was almost at its lowest during recent years. This table indicates what one would expect, since an important cause of business failure for certain businesses is lack of capital. On the other hand, some experts argue that ample capital also breeds business failure, because the management can plunge into extravagances in equipment and advertising. This situation seems to be less common or serious than lack of capital. Some of the methods of obtaining credit or working capital are:

1. Try to find capital within your own activities.—When in need of capital, some manufacturing companies can find the capital within their own establishments by cutting down the investment in materials-in-process. Mercantile concerns can decrease their inventories. These methods of obtaining funds are problems for the business organizer rather than for the psychologist. The economy or efficiency method of obtaining capital is similar to the procedure of the individual who continues to drive his old car rather than buy a new one.

2. Present your financial situation in writing.—When asking for credit of bankers, it is well to prepare a *true* statement of the situation. This statement should show more than most financial statements show. It should dwell on proofs of efficiency in management, such as the ability to save regularly a part of the profits. When an individual

wishes to obtain credit from a banker, the banker is more interested in the regularity of savings than in the amount of money saved. To the banker, this indicates stability, and bankers admire that as much as other essential traits, such as character and business strategy. It is hardly necessary to add that the one seeking credit or a loan should be quite willing to present a financial report and allow the banker to check the report by sending his own accountants to the borrower's office. If the borrower objects to an inspection by the lender, the lender always suspects the motives of the borrower.

3. Establish a reputation for credit reliability.—In order to establish a reputation for reliability, some men borrow money even though they have no need for it. The fact that the banker has had previous successful dealings with the individual or concern enables him to judge the future from a pleasant past record. "The banker lends money with half an eye directed toward the future and one and one-half eyes focused upon the past record of the man who wants the money."

Every concern knows that the firms who discount their bills have an enviable credit standing and can obtain credit when dealing with new concerns. In some cases, it may be advisable to borrow from banks in order to pay cash and secure discounts at a higher rate than that charged by the banks.

The banker who lends money to a business executive or a firm should be made to feel that he knows all about the individual or the business. Advice should be asked regarding nonfinancial matters, such as the recommending of applicants for employment, collection methods, sales policies, etc.

Recently, two customers wanted credit at a department store. The one who had ample assets and paid all bills in cash wanted five hundred dollars' worth of furniture on credit. The store refused to grant the credit, because he had paid all bills in cash and had no record of credit standing. The other man had few assets, but was allowed to buy

a fifteen-hundred-dollar piano on easy terms, because he had had a charge account there for several years. A credit reputation had been established in advance of the need for credit.

4. Show proof of stability of operations and future plans.—The executive who studies the credit risk is concerned about the permanence of the seeker of credit. He, of course, wants to learn enough about the business to decide whether the borrower's business is legitimate, is efficiently conducted, and is of reasonable stability. One-man businesses are especially subject to the vicissitudes of nongovernable conditions. One banker refused a loan to a very successful business, because the salary of the manager was $25,000 per year, whereas the salary of the next highest paid executive was only $6,000. The banker believed that the firm would be apt to perish if the manager should die, should become ill, or should take a trip to Europe. The lender of money or the extender of credit wants to know more than the immediate solvency and efficiency of the management. He wants to know also whether the efficiency is likely to continue indefinitely.

5. "Chickens come home to roost."—The moral conduct of the managers or owner-managers may be more important than is often realized. Statistics are not available to show the effects of immoral conduct on efficiency and credit standing; but it is quite evident that they are important. This does not mean that a socially reprehensible individual may be unable to obtain loans or credit extensions, but he must have a far stronger financial position than the one who also has a sound moral reputation. Life insurance companies will refuse a hundred-thousand-dollar policy to a wealthy man who passes the physical examination, but is reported to be of immoral conduct.

Tricks of holding off creditors may succeed for a short time, but they soon end the business career of the proprietor who plays them. Such stunts as sending checks that are made out incorrectly, constant renewal of notes, requests

for additional extensions of time, borrowing from one to pay another, playing the stock market, shading the product or service, and using credit for capital all end, as a rule, in a state worse than the first. Many a man has been loaned money or given credit when he had little or even no security to offer, but he convinced the other fellow that he had character, was industrious, and lived the kind of moral life that the banker himself must lead in his community.

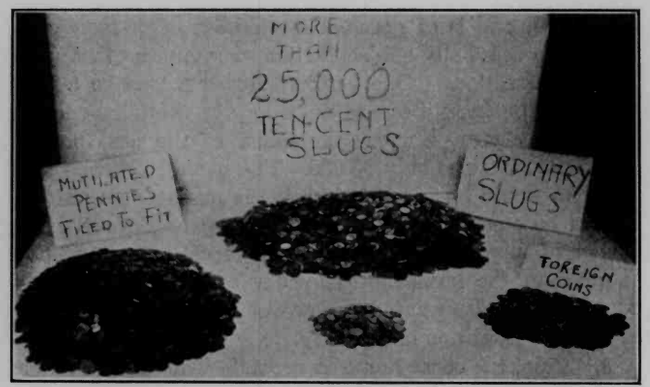


Fig. 15—One New York firm operating five and ten cent vending machines collected over twenty thousand slugs in 1927. From Herbert B. Clark, "Stop-Look-Listen before Trying Automatic Selling," *Sales Management & Advertisers' Weekly*, Aug. 4, 1928, p. 285.

Cashing Checks for Strangers

When the business man is handed a check and asked to cash it, how can he analyze the situation and decide whether he should cash or refuse to cash it? So far as the writer has been able to learn, men who constantly cash checks have very few rules or criteria to guide them. Estimates indicate that about three and one-half billion dollars are lost each year through criminal activity. Of this total, $400,000,000 are lost through credit frauds and $100,000,000 by forgery and worthless and bogus checks.[11] These

[11] *Printers' Ink Weekly*, May 28, 1925, p. 47.

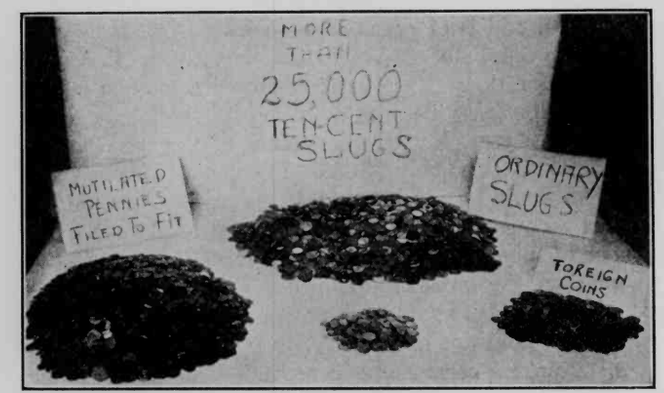
figures indicate that a very large sum of money is being lost through the inability of the business man to decide upon the honesty of the man who asks to have his check cashed. This is the dark side of the picture. The pleasant side is the fact that there are eight hundred billions in check transactions in the United States yearly with less than five billions of money in circulation. In Massachusetts, last year, out of 176,184 small loans made by banking concerns which specialize in the making of small loans, only 858 proved to be uncollectable. The defaults usually ran under 1 per cent.[12]

In proportion to the total number of checks handled each day, the per cent of loss is small. The reason for this lies in the fact that, in most cases, the man who deliberately attempts to get a bad check cashed is a stranger or near-stranger and knows that he must be clever to accomplish it. He also knows that he must leave that part of the country and that he cannot engage in the normal business activities of the community. The risks are too great except for the professional crook. It is seldom that bankers and credit men decide to cash a check on the basis of the personal impression of the man who offers the check. Bank clerks have definite rules to follow and the rules protect them. They have no superior ability to size up a man and decide when to cash the check of a stranger. It is true that they do turn down a stranger occasionally and then later find that the man was a "check passer." Some customer of the bank may later come in and mention the check he cashed and now finds to be worthless. The bank clerk then pats himself on the shoulder and thinks that he sized up the crook as "not giving him a feeling of honesty," etc. As a matter of fact, the good checks that the average bank clerk refuses to cash are probably far more than the bad checks that he refuses to cash. He simply obeys the rules of safety more implicitly than do others. He also plays the game

[12] Haring, H. A.: "Lending Money to Small Borrowers," *Advertising and Selling Magazine*, Jan. 23, 1929.

INTENTIONAL SECOND EXPOSURE

for additional extensions of time, borrowing from one to pay another, playing the stock market, shading the product or service, and using credit for capital all end, as a rule, in a state worse than the first. Many a man has been loaned money or given credit when he had little or even no security to offer, but he convinced the other fellow that he had character, was industrious, and lived the kind of moral life that the banker himself must lead in his community.



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[12] Haring, H. A.: "Lending Money to Small Borrowers," *Advertising and Selling Magazine*, Jan. 23, 1929.

safely because, to some extent, his job is at stake. The clever check artists know the rules of the banker and obey the rules outwardly. That is how the bank clerk gets caught—he obeys all the bank's regulations about cashing checks, but the crook uses a new angle. It is well, however, for the business man who is called upon to cash the checks of strangers to know the most common rules used by bankers and hotel men, so a list is given herewith.

1. Watch *counter checks*. Eighty-five per cent of the worthless checks are written on counter checks.[13]

2. If in doubt, and the check is large, communicate with the bank and ask the stranger to pay a part or all of the cost of the telephone call or telegram. In this connection, however, it is well to remember that a verbal certification is not binding on the bank. The person giving the check may have the money in the bank when the telephone call is made, but he may withdraw it before the check is presented to the bank. Should this happen the bank cannot be sued for payment of the check.

3. View with suspicion the customer who wants a large margin of cash in excess of the purchase price of merchandise. One crook has followed a schedule of the openings of colleges of the East. He visits each on the opening day, buys a book, and offers a fifty-dollar check in payment. Inasmuch as many students do this, the check artist has been able to make money by his scheme, because he can usually get a check cashed at each store in the college community at that season of the year.

4. Checks individually printed or filled in by a check writer are not necessarily safe. When the checks are large, the danger is great that the crook may have had them printed for him.

5. Compare handwriting on the front and back of second-party checks. If the two are very similar, it is well to ask for additional evidences of identity.

[13] Bartlett, John T.: "12 Rules for Safe Checks," *Playthings*, October, 1928, p. 94.

6. Ask for street address, telephone number, and names of persons in the community known by the person who wants the check cashed. Write these on the bottom of the check for future reference.

7. The fact that the stranger shows you his bank pass book, mail addressed to him, and other "proofs" do not prove that he has the money in the bank to cover the check. If the check is presented after banking hours or on holidays, it is well to be cautious.

8. If a stranger's check is cashed, observe him carefully and note his personal description on a memorandum.

9. If in grave doubt, send him to some experienced credit man such as the credit man employed by a large hotel or a bank. These credit men specialize in the cashing of checks and have a number of rules to guide them, such as presence or absence of baggage, records of the methods used by professional crooks, and pictures of those who have defrauded others.

10. Do not allow your feelings to govern your action. If the stranger appears to be very entertaining and honest and you like him, it may or may not indicate that the check is good. Remember that the evidences are all against the theory that an experienced executive can, in some mysterious manner, analyze the honesty or other character traits of strangers. The stranger gives us feelings of pleasantness or unpleasantness because he happens to have some characteristics that we have encountered in others whom we like or dislike. The reasons for these likes and dislikes are accidental and incidental to the real character of the person whom we meet. Intuition and "hunches" are less reliable than rules of experience. If the business man decides that he must cash the checks of some strangers then he must also decide to suffer a certain percentage of loss. With reasonable caution, this loss will be small in comparison with the number of checks cashed, because far more checks are good than bad.

Projects.

1. The Filene Store of Boston inaugurated a plan of charging 50 cents per month for using a credit account and 10 cents for each delivery. After about ten months of trial it was discontinued because the public did not like the plan.

Is a special charge for credit feasible in certain merchandise fields? If so, what are the conditions in those fields?

2. One chain of credit clothing stores will not sell on credit to any one unless he is employed 36 hours or more per week. Would it be better to vary the number of hours for certain classes of customers?

3. Ask several of your friends to assist you in an experiment. Tell them to answer some of your questions truthfully and some falsely. Have them keep a record. Analyze the resultant data and compute the per cent of your judgments that were wrong.

4. Ask several of your friends to present checks of varying amounts to you for cashing. Then quiz them to find out whether you can analyze their answers correctly.

5. Outline a program of procedure so that you can borrow money from a bank in case of need. Assume that you have no security to offer.

6. From *Domestic Commerce,* July 22, 1929, page 34:

The preliminary report on the National Retail Credit Survey, recently released by the Domestic Commerce Division, includes statistics on the percentage of bad debts on open and installment credit sales for department stores, automobile dealers, and independent retail grocery stores reporting by April 13, 1929.

The average loss for the 440 department stores reporting, representing the ratio of total bad debts to total open and installment credit sales respectively, was 0.4 per cent on open-credit accounts and 1.1 per cent on installment accounts. Chain department stores had an average loss on open-credit sales of 0.8 per cent and on installment sales of 1.3 per cent, compared with 0.4 per cent and 1.0 per cent for other department stores.

The 339 automobile dealers, on the other hand, lost less on their installment accounts than on open-credit sales, bad debts representing 0.4 per cent of installment credit and 0.9 per cent of open-credit sales.

The percentage of bad debts on open-credit accounts for the 843 grocery stores doing cash and credit business was 0.6 per cent, the range being from 4.9 per cent loss for stores with total sales under $9,000 to 0.4 per cent for stores with total sales of $250,000 and over.

What psychological factors contribute to these differences in losses?

CHAPTER IX

Hiring the Employee

The Interview

The unreliability of the usual interview.—If 57 pieces of coal were handed to twelve mine foremen and they were asked to rank the pieces in order of the amount of carbon in each piece and some of the men claimed that one chunk was the best in the lot and others said that it was the poorest, we would question the ability of the men to judge coal. We would seek a better method of judging. Yet that is what happened when twelve sales managers ranked 57 applicants for selling jobs. Hollingworth conducted an experiment in which twelve sales managers interviewed 57 applicants, each applicant to be given a rank of from 1 to 57. A rank of 1 meant that the sales manager considered the applicant the most suitable, and a rank of 57 meant that he considered the applicant the least suitable, of the men interviewed, for the position. Each interviewer was given a private room in which to do his interviewing and he could ask any questions or do anything that he wished so long as he kept records of his judgments.

When the data were analyzed, it was found that one applicant had the following rankings: 1, 2, 6, 9, 10, 16, 20, 21, 26, 28, 53, and 57. Another applicant was ranked 2, 4, 9, 13, 16, 16, 19, 28, 32, 33, 46, and 55 by the managers. Much the same rankings were given the other applicants. Occasionally, an applicant tended toward low or toward high ratings.[1]

[1] Hollingworth, H. L.: "Judging Human Character," D. Appleton & Co., 1923, pp. 62–66.

Walter Dill Scott conducted a similar experiment where he had six sales managers rank 36 applicants for selling positions. The same inconsistent results were obtained and he said: "In the case of 28 of the applicants, these six managers disagreed as to whether the individual should be placed in the upper half of the group or in the lower half. An inspection of the table shows much disagreement among the six managers, but the disagreements are striking. Thus, applicant 17 was thought to be the third best of the group by Manager C, but was placed thirteen by Manager B. Applicant 18 was thought to be the best in the group by Manager E, but was ranked as tied for the thirty-second place by Manager D. Yet there is reason to believe that these six gentlemen agreed even more closely than is the case with employment agents in general." [2]

Several similar investigations have been conducted and all have demonstrated that the interview cannot be relied on to predict the behavior of applicants. Many experienced employment men realize that they cannot judge applicants with any great degree of accuracy on the basis of the interview alone. They try to obtain dependable information from former employers or to hire the applicant for a probationary period. In spite of the unreliability of the interview, it will continue to play an important part in modern hiring. Somehow, human beings want to see each other, even though that meeting may not indicate anything of value.

Kinds of interviews.—Interviews may be classified into six varieties:

1. The casual conversational talk.
2. Making it difficult for the applicant.
3. Systematic questioning.
4. The statistical interview.
5. The psychological test.
6. The psychoanalytical interview.

[2] Scott, W. D.: "Scientific Selection of Salesmen," *Advertising and Selling Magazine*, October, 1915, pp. 5, 6, 94–96.

The casual conversational interview.—This kind of interview is the most common in American industry and also the least reliable. It is the type that was used in the above experiments which gave such unreliable results. It usually consists of a series of random questions where the interviewer tries to get the general history of the applicant. The questions differ for each applicant. The conversation may be in the control of the interviewer or of the applicant. The typical questions asked are: Where did you work before? Are you married? How old are you? Why do you want to work for us? What education have you had? Do you go to church? How much money did you get on your last job? etc. In some cases, the interviewer endeavors to put the applicant at ease and have him talk about himself. In the meantime, the interviewer decides whether he likes the applicant. He may be very favorably impressed or greatly annoyed, depending upon the associative linkages that happen to have been built in the interviewer by the meeting of people whom the applicant consciously or unconsciously resembles.

Prejudices are an important factor in this type of interview. If the employer has recently hired a man who once sold cash registers but failed on the job, under consideration, he is apt to be prejudiced against all men who have sold cash registers. One executive claimed that all the men who had mustaches failed with him. Even though he had hired only three men with mustaches, and dozens without mustaches, who had failed, he still believed that a mustache was an indication of poor material for his organization. Some executives dislike applicants who have red hair, bad teeth, wear bow ties, green socks, derby hats, etc. It is fortunate for the applicants that executives differ in their prejudices, because, if one employer rejects them, they can always go to some other employer who may like the very trait for which they were rejected by others.

Occasionally, a few objective criteria are developed by the interviewer who uses the haphazard method. If he

hires carpenters, he may observe the applicant's hands for calluses or his tools for their condition, or he may ask how many pine doors he can hang in a day. It is assumed that only a member of the trade can answer the last question. The chief purpose of the casual conversational interview is that of asking a few more or less relevant questions and then hiring the man who appears to be the most capable.

The interview that is made difficult for the applicant.—The story of the way in which one sales manager accomplished this and then hired his applicants has become a classic in sales literature. This manager arranged his office so that he himself occupied the only chair. The hat rack and the nails on the wall had been removed. When an applicant stepped into the room, the manager said: "Hang up your hat and sit down." Then the manager continued to write at his desk. If the applicant simply stood and waited in an embarrassed manner while he hoped that the manager would look up and talk to him, the manager soon told him to leave as he did not want him. The manager was pleased, however, when he received an applicant who looked around the room for a chair and a place to hang his hat, and not finding any, came to the manager and said: "Well, brother, you'll have to show me how to do it." This manager assumed that the latter type of applicant had the requisite amount of initiative to be a good salesman.

A similar method is used by an executive who hires men for dangerous jobs. His men must be able to defend themselves in physical combat. Accordingly, when an applicant calls on him, he begins the conversation by insulting the applicant. He "cusses" him several times and wants to know what he means by applying for a job with him. If the applicant accepts the insults with politeness, he is rejected. On the other hand, those applicants who reach across the executive's desk and try to punch him on the nose are sure to get a job!

This method, in milder form, is used by many sales managers. One manager of a concern that sold books on the

installment plan asked the applicants to fill in a lengthy application blank and then come back for an interview. After the blank was filled in, he paid little or no attention to it; but he believed that the applicants who really wanted a job with him would be willing to go to an extra amount of trouble to get it. Many employment managers make it a rule not to hire any man on the first interview, but require him to fill in an application blank at home and mail it to the company. In some concerns, less than one-fourth of the blanks given out are returned. This probably does eliminate the applicant who merely wants to "look" at jobs rather than actually to get one. Every employment man knows that some applicants drop in to see him by mere chance and many do not care whether they obtain a job with that particular concern. Some men have applications pending with several firms, and, in the meantime, apply at other places just to be on the safe side in case the expected job is not obtained. The more difficult the interview, the less effort will such applicants put forth to get a job, unless the hoped-for position does not materialize.

Managers of bond salesmen and commission propositions often adopt the difficult interview. They believe that painting the job as dark as possible eliminates the weak and the vacillating and has a better effect on the applicants than if they are told the brighter aspects of the work. No statistical evidence has been collected which proves or disproves the value of the difficult interview. It is certain, however, that some sales managers know that their best workers are those who snubbed the job when it was first offered them. If managers of insurance salesmen are questioned, it is probable that some of them will tell interesting stories of how they induced a man to take up the selling of insurance in spite of the fact that the admired individual, at first, disdained the job.

The systematic questioning type of interview.—This is not the most scientific interview, but it is the most practicable for the majority of interviewers. In this kind of inter-

view the questions are not asked the applicant in a haphazard manner but according to an organized procedure. The interviewer keeps a record of the results of the conversation with the applicant. He tries to ask questions that require factual answers rather than opinions. In some cases, he adds some problems which are of a semitrade nature. The questions in *The Interviewer's Guide*, page 199, were prepared by a group of employment men and executives who wished to have a list of definite questions to guide them. The thirteen suggested questions may be used in conjunction with the usual employment application blank. The questions may be phrased to suit the interviewer and the applicant, but it is essential that the interviewer ask each question and record his answer while he is conducting the interview. If he does not adhere to a definite procedure, he is apt to let the interview become a hit-and-miss conversation that will not give him complete information. This set of questions may be placed under the glass top of the interviewer's desk so that it is convenient for his guidance. Of course, the interview may be terminated long before the last question is reached, because of obvious unfitness of the applicant.

Empirical rules in the selection of salesmen.—The sales manager who cannot use the statistical interview, but must use the standardized quiz, soon decides upon the types of applicants whom he will not hire. One sales manager needed men who could make about $4,000 per year with his company. When an applicant called who had made $8,000 in any one year, he would not hire him. Having one high year causes most salesmen to classify themselves in the highest possible class. If, through a fortunate combination of circumstances, a man happens to make $10,000 in any one year of his life, he probably prefers to think of himself as a $10,000 man. Should he be compelled to take a $4,000 job, he may have difficulty in adjusting himself and his standard of living to the lower income.

THE INTERVIEWER'S GUIDE

Name ..... Address .....
Position wanted ..... Date ..... Interviewer .....

The interviewer begins each interview with this statement to himself: "This applicant will impress me according to my past experience with persons who remind me of him. I must keep a record of the facts and judge the applicant on the basis of the facts only. The applicant is a blank to me now."

1. Give me the names of your past employers. Begin with the last employer and go backward for the last five years.
2. Describe the work you did for each.
3. What did you do in your spare time: evenings, Saturdays, and Sundays? (Look for side lines and hobbies, reading of trade journals, clubs.)
4. What general education have you had?
5. What technical education have you had?
6. What is state of your health? How much time have you missed from your work because of sickness during the past two years?
7. For what other jobs have you applied with other concerns recently?
8. What is your financial condition: savings accounts, life insurance, investments, speculations, own home?
9. With what merchandise firms do you have credit accounts?
10. What are your plans for the future, vocationally?
11. What suggestions have you made regarding improvements in operations for your former employers?
12. Why do you want to work for us? Interviewer's deductions:

Be near friends	Just need a job .....
For home reasons	Seems restless .....
Likes the community	Floater .....
Regularity of work	Family reasons .....
Self-expression	More pay .....
More prestige	For opportunity .....
Union reasons	Other reason .....

13. What pay do you expect? Overestimates his worth .....
Underestimates his worth .....
Fair estimate .....

DECISIONS FOR THE INTERVIEWER TO MAKE DURING THE INTERVIEW

14. Would his personality fit our organization? .....
15. Is applicant eager for the job? .....
16. Does the applicant fit the job that is open? .....

Too good for the vacancy	Undoubtedly satisfactory .....
Not suited to vacancy	Probably a safe man to hire ....
Unable to do the work	Hire, if no better applies .....

17. Remarks: .....
.....

Some executives never hire a man who has worked for a competitor. They believe that the man who has been trained under one set of conditions will cling to those former beliefs and habits and refuse to become a team-worker in a new organization. Some managers will not hire salemen who have had training in a systematic training course where they had to learn a standardized sales talk. On the other hand, one life insurance company found that 20 per cent of the men who had had previous life insurance selling succeeded in their company.

Certain executives are greatly interested in the amount of money that an applicant owes installment houses. They believe that, if a man is hounded by bill collectors, he cannot do good work. If such a salesman is out in a territory away from home, he is apt to borrow money from customers, have worthless checks cashed, and ask for advances on his pay. If a salesman borrows money from a customer or gives a customer a worthless check, the employer must pay the loss or lose the customer.

Other executives will not hire recent college graduates, because they believe that college men require three years in which to orient themselves. They are believed to want immediate promotions and to loathe doing any routine work. In college, they studied international problems, the progress of civilization, the boundaries of the universe, great social forces, and historical movements; hence, small wonder that the college graduates are bored when they must spend hours checking detailed bills in a butter-and-egg firm. Once a college graduate finishes about three years of floundering, then these executives will hire him without very much quizzing about his past failures. It is believed that he is then ready to fit himself into the business picture without demanding a front seat.

One executive claims that young single men succeed better than young married men. The young married men are either too greatly interested in their wives to study their

jobs or they are ambitious to buy the wife expensive articles for her adornment.

Many executives insist that the applicant shall state the other concerns where application has been made. It is not unusual to hire a man, put him on the job for several weeks, and then have him quit because he has obtained a position with a firm where he had made previous application. Before hiring the new man, the executive should request him to write letters of withdrawal to all the firms where application has been made.

One executive may take applicants for important positions to dinner and gauge their ability by their table manners. Another may argue with the applicant to discover how he conducts himself toward an unruly stranger. The empirical rules for hiring vary with the executive. Most of these rules are merely the result of a few dramatic instances. Many are without sound statistical basis. If the number of jobs of any one classification is large enough to allow it, the executive in charge of interviews should make a statistical analysis of the factors that are relevant to success and failure of employees of his firm. *The Interviewer's Guide* or other personnel records will be sufficient for a valuable analysis of the specific characteristics which enable applicants to succeed or cause them to fail in any one kind of job.

The statistical interview.—The interviewer, as stated above, acquires a number of prejudices or empirical rules for the selection of employees. When he uses empirical rules, he soon finds that he must revise his rules and then he wonders what a statistical study would reveal. The executive who refuses to hire a married woman as his stenographer may be compelled, by force of circumstances, to allow one to work for him. To his surprise, she pleases him. Exceptions soon arise in his hiring rules. A statistical study of the relation between success on the job and the characteristics of the employees is, obviously, the only sound basis for hiring applicants. The life insurance companies have led the procession in the statistical analyses of the human

factors in their relation to success on the job. Two examples of the results of these earlier studies are the following tables prepared for the Equitable Life Assurance Society: [3]

TABLE XVI

Number of Salesmen	*Age*	*Average Monthly Sales per Man*
149	below 26 yrs.	$ 490
154	26–30 "	880
111	31–35 "	1,320
100	36–40 "	1,030
149	over 40 "	660

TABLE XVII

Number of Salesmen	*Amount of Insurance Carried*	*Average Monthly Sales per Man*
96	0	$ 230
210	$ 1–$4,999	740
90	5,000– 9,999	1,300
116	10,000 and over	1,610

After a statistical analysis has been made of the characteristics of good and poor salesmen, a mathematical scoring may be given to various degrees of each predictive factor. The Guardian Life Insurance Company of America at one time gave the following scoring to different ages of applicants for their sales force:

Age	*Score*
18–20	—2
21–22	—1
23–24	0
25–27	+1
28–29	+2
30–40	+3
41–50	+1
51–60	0
over 60	—1

Certain scoring was given other variables, such as the kind of previous occupation of the applicant, his education, marital status, club membership, amount of insurance carried, previous selling experience, etc.[4] All these various factors were combined for the applicants who had been hired by the company and the following table presents the percentage of salesmen with different production records making various total scores on weighted items:

[3] Richmond, H. A.: "Determining Factors in Selection of Salesmen." *Administration*, January, 1923, p. 49 ff.

TABLE XVIII

Production Record of the Salesmen	Total Score		
	Below 4	*4 to 8*	*Above 8*
Best Group	15%	41%	44%
Middle Group	18	54	28
Poorest Group	53	37	10

With this table before them, the officers of this company could adopt a critical score of 4 points. Applicants whose total scores fell below 4 could be avoided and only a few good salesmen would be lost. The company could also concentrate upon securing salesmen whose score totals were 8 or above.

The Phœnix Mutual Life Insurance Company at one time determined the critical score for salesmen by simply adding together, into a composite score, the percentages of men who succeed according to the traits shown in Table XIX. Their method of selecting salesmen has been statistically improved, but it was found that when Table XIX was used, a composite score of 350 was the critical point. A study of 100 successful men and 100 failures indicated definite predictive values for their system of analyzing applicants: [5]

TABLE XIX

Statistical Scoring of Applicants as Used by the Phœnix Mutual Life Insurance Company

	Percentage who succeeded in the past or score
1. Age:	
18–20	12
21–29	21

[4] Goldsmith, Dorothy: "The Use of the Personal History Blank as a Salesmanship Test," *Journal of Applied Psychology*, June, 1922, pp. 149–155.

[5] These data are published by special permission of the Phœnix Mutual Life Insurance Company. The table of scores has been revised and improved since the publication of this report.

TABLE XIX *(Continued)*

STATISTICAL SCORING OF APPLICANTS AS USED BY THE PHŒNIX MUTUAL LIFE INSURANCE COMPANY

	Percentage who succeeded in the past or score
30–38	30
39–42	42
43 and over	22
2. Number of Dependents:	
Single	15
Married, with not more than one other dependent	31
Married, with two or more other dependents	18
3. Previous Income:	
$ 0–$174	11
175– 399	28
400 and over	45
4. Previous Occupation:	
Salesman of bonds, general insurance, real estate, etc.	44
Salesman of tangible products	33
Executive	35
Retail merchant	32
Professional	27
Clerk	26
Student	24
Teacher	18
Foreman in manufacturing company	12
5. Changes in Position:	
1	25
2	32
3–5	29
6 and over	21
6. Selling Experience:	
No selling experience	22
Less than three years	21
3–7 years (not inclusive)	28
7–13 years (not inclusive)	47
13 years and over	36
Life insurance selling	29
7. Investments:	
0–1	16
2–4	28
5 and over	46
8. Life Insurance Carried by Prospective Salesmen:	
None	11
Below $8,000	24
$8,000 and over	35
9. Per Cent of Income Saved in Last 5 Years:	
Below 10	22
10 and over	34

TABLE XIX *(Continued)*

STATISTICAL SCORING OF APPLICANTS AS USED BY THE PHŒNIX MUTUAL LIFE INSURANCE COMPANY

	Percentage who succeeded in the past or score
10. Education:	
Under 12 years out of school:	
Grammar or high school (nongraduate)	8
High school graduate or 1 or 2 years of college	20
3 or more years of college	34
12 or more years out of school:	
12 to 19 years out of school	30
20 or more years out of school	39
11. Study in Business or Correspondence Course:	
Grammar school or less education:	
With business or correspondence course	40
With no business or correspondence course	21
With more than grammar school education	32
12. Present Membership in Organizations:	
0–4	20
5–6	37
7 or more	77
13. Office Now Held in Various Organizations:	
0–2	23
3	32
4 or more	56

TABLE XX

PER CENT OF MEN IN EACH SCORE-GROUP

Scores	*100 Successes*	*100 Failures*
370–470	47%	15%
320–369	43	47
260–319	10	38

The company found that 500 salesmen now sell over three times as much as 1700 sold just before a more careful selection of salesmen was inaugurated. The turnover in salesmen was reduced 34 per cent and the compensation of the men was increased. Of course, not all the increases in efficiency could be attributed to better hiring alone, but it did provide the company with men who could assimilate the company's training and coöperation.

When researches by a company enable the interviewers to establish a critical score for the characteristics of the applicant, the interviewer allows the scoring device to select

the most acceptable applicants. After he has found those who are likely to succeed, he must then deal with the intangibles of the interview: the applicant's liking or distaste for the job, ability to finance himself, attitude toward the company, etc. The statistical interview is scientifically the most sound, but it is limited by the need for a large number of employees before safe analyses of personal characteristics can be made. Each firm must make its own statistical analyses and establish its own critical scores. The scoring criteria of one firm may not fit the needs of another.

Psychological tests in hiring.—Companies which conduct statistical researches of the various factors that enable them to predict the success of applicants often use psychological tests as one prediction variable. Tests alone are not sufficient for hiring or rejecting an applicant in most firms. They are merely one of the factors that must be evaluated, just as age or education must be weighed in the composite score. The tests may have greater predictive value than any other one variable, but in most firms the other variables must be considered in the total picture of the applicant. It is also necessary to point out that tests are not to be construed as a kind of interview, but, rather, as an important part of the statistical or other type of interview.

Psychological tests and intelligence tests are terms often used loosely by modern business men and even by scientists. In very many cases a business man thinks he is using psychological or intelligence tests when actually he is merely asking a number of random questions. For example: a business man may find that he needs a new secretary. Accordingly, he advertises in the usual manner and when he arrives at his office in the morning he may find an applicant there. He then opens the morning mail and chats with her while he is taking casual glances at the letters which await his attention. Then, deciding that it would be well for him to "test" the applicant, he picks up one of the letters which he must answer and dictates a reply. The applicant types the letter, gives it back to him, and he examines it for errors

and appearance. He then dismisses the first applicant and awaits the coming of the second one, at which time he again answers another letter—an entirely different one. In this

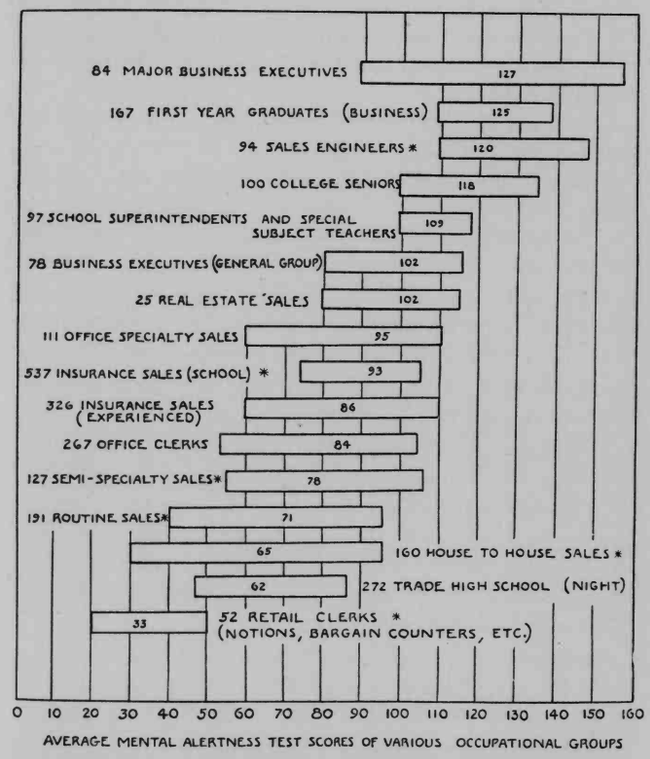

Fig. 16—Average mental alertness test scores of various occupational groups. The degree of intelligence required for selling varies with the kind of salesmanship.—*From H. G. Kenagy and C. S. Yoakum, "The Selection and Training of Salesmen," p. 274. McGraw-Hill Book Co., Inc., 1925. By courtesy of the publisher.*

manner he "tests" five applicants, after which he makes his decision. He thinks he has given each one of the applicants a psychological or an intelligence test. As a matter of fact, he has not done so at all. If he were to give a psychological

test, certain factors would have to be standardized for all applicants, namely:

1. *Materials.*—The same letter and appliances must be used for each person.

2. *Instructions.*—Each applicant must receive the same instructions regarding speed and accuracy. Instructions should be read.

3. *Technique.*—The speed of dictation, enunciation, etc., must be kept the same.

4. *Conditions.*—Distractions should vary as little as possible.

5. *Interpretation of score.*—The score of each applicant must be compared with that of other stenographers of high, medium, and low ability.

Any test, to be of value, must fulfill three requirements: it must be *objective,* so that personal opinion does not enter into the scoring; it must be *valid,* that is, it must test the trait that it is supposed to test; and it must be *reliable,* that is, it must give the same results regardless of the particular individual who administers the test. Many of the tests that are published in magazines do not fulfill these three requirements. Such tests are still in the experimental state and may have promise of future results; but they should not be used as a basis for hiring until their predictive value has been statistically determined.

A psychological test is any problem or series of questions which has been tried out on persons of known ability; and it has been shown that the scores made by these persons correlate with their records in some other form of ability. Therefore, one of the chief requirements for preparing psychological tests is that of statistical training.

Many business men and scientists are using such tests, but the terminology is not very well standardized. The various terms used to describe them are: intelligence, aptitude, efficiency, mental alertness, information, specific ability, performance, mental, job, trade, and army tests.

Contrary to popular opinion, intelligence is not greatly affected by education. The *Intelligence Quotient*

$$\text{I. Q.} = \frac{\text{Mental Age} \times 100}{\text{Chronological Age}}$$

tends to remain the same as the child becomes older. A child who has an I. Q. of 120 at eight years of age will also tend to have the same I. Q., at fifteen years of age; hence, we can think of capacity as the "Angle of Intelligence." We believe that intelligence is a native rather than an acquired trait, because it remains constant during the growth of the child and runs in families. However, we do not use the term I. Q. for adults. When children near the age of sixteen, it is difficult to compute the relation between mental development and chronological age. For adults, we prefer to specify the *Percentile Rank* (P. R.), that is, the percentage of the population or group that ranks higher or lower than the person tested. If a test shows that an applicant has a P. R. of 50, it means that 50 per cent of the population (or group) rank lower in the test than the applicant and 50 per cent rank higher; hence, the applicant is average for that trait. Similarly, if he has a P. R. of 75, he is higher in that trait than 75 per cent of the population and lower than 25 per cent.

The psychological test does not evaluate all the person's ability, but merely tests parts, samples, or symptoms of ability. The psychological test is very similar in nature to the tests made by the assayer of minerals. If a man were to purchase a vein of silver ore, he would first secure samples of it and have these analyzed by some competent chemist. On the basis of the samples, he would decide upon the value of the ore and the price he would be willing to pay for it. Obviously, he could not test all the mineral in the vein of ore. Similarly, the psychologist tests samples of a person's abilities rather than all of them.

Tests may be given to a single individual or to a group of persons. The group tests are the less reliable. If an

applicant scores low in a group test, he may or may not score low in an individual test. If he scores high in a group test, he will also tend to score high in an individual test.

Psychological tests decrease favoritism in hiring and place the securing of a job on a basis of science rather than sentiment. Such tests are a convenient scheme for avoiding pressure from friends and politicians who may have some friend who needs a job. By having definite standards which every applicant must meet, the executive can always say to the man who has a nephew that needs a position: "We shall be glad to have the young man apply to us for a job, and if he meets the standards we have set up, we will find a place for him." They also have great value in locating applicants and employees who have exceptional capacity or psychoneurotic tendencies.

Several examples of the economic value of tests.—Psychological tests were first used in education, where it was found that the children who made high scores on these tests also made the greatest and most rapid progress in school. In social service studies, it has been found that most people who clutter up our charity bureaus and constantly demand help in order to keep alive are of low intelligence, or have some mental abnormality.

During the World War, analysis of records indicated that, of candidates for commissions in one officers' training camp, none of the men who made E scores in the *Army Alpha Test* succeeded in securing a commission; of those who scored C plus, or high average intelligence, 45 per cent secured commissions; of the A grade, or very superior intelligence, 97 per cent were commissioned. All these candidates were subjected to the same training course for three months.

Dr. A. J. Snow made a study of the records of 6,000 drivers of the Yellow Cab Company in Chicago, covering a period of one year, and found that 46 per cent of the accidents were caused by 18 per cent of the drivers. It was evident that, if this 18 per cent could be replaced by safe drivers,

the number of accidents would be considerably reduced. Accordingly, as a result of the use of the psychological test method, he found that it was possible to reduce the accidents more than 30 per cent.

Experiments with tests for the measurement of business ability have shown a definite relationship between scores in these tests and income in the business world. By means of such a test it is possible roughly to estimate an applicant's business ability without knowing his age, previous experience, or education. The reader is referred to the Business Ability Test in the Appendix.

TABLE XXI

INTELLIGENCE AND LENGTH OF SERVICE *

Test Score	*Average Length of Service in Days*
10 to 19	3
20 to 29	91
30 to 39	156
40 to 49	142
50 to 59	107
60 to 69	100
70 to 79	96
80 to 89	87
90 and above	35

Limitations of tests.—Psychological tests have demonstrated their values in many phases of business, but are especially helpful in reducing labor turnover. When a critical score is once determined and an executive decides that no applicant shall be hired unless he scores above that point, the executive is also apt to go to the opposite extreme and try to hire only those who score considerably above the critical point. This may result in a high turnover, for it is desirable to have a maximum score as well as a minimum score or an *optimum range* (see Table XXI). One employment manager started to use tests for hiring and then hired only persons with high intelligence for all his jobs. His method resulted in a high turnover, because few of the jobs were worthy of a person

* Burtt, Harold E.: "Employment Psychology," Houghton Mifflin Co., 1926, p. 289.

of high intelligence. The well-manned corporation is like a well-manned army; it consists of only one general, a few high officers, many low-grade officers, and the great mass of the organization made up of average or low intelligence. An elevator operator should have the intelligence needed for that kind of work and not very much more. If this

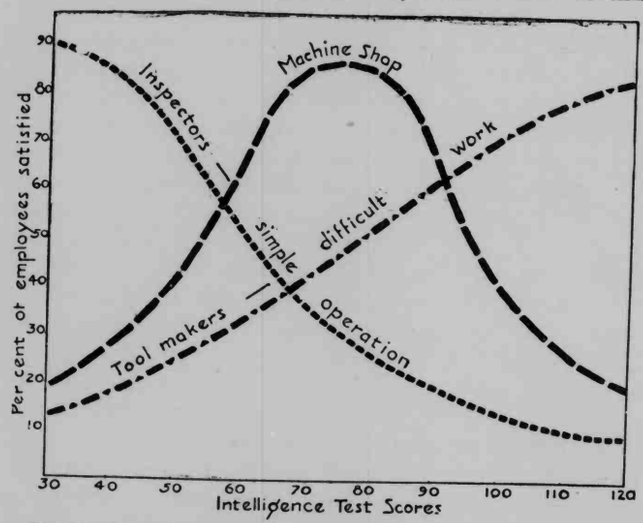

Fig. 17—Labor turnover and the intelligence of employees are closely related. Toolmaking is a grade of work that requires a high degree of intelligence. The toolmakers of high intelligence tend to be more satisfied than those of low intelligence. The inspectors in this particular company perform only simple operations. Hence, the inspectors of low intelligence are more satisfied than those of high intelligence. The machine shop required an average grade of intelligence; consequently those of high and low intelligence were more dissatisfied than those of average intelligence.

country should suddenly embark upon a eugenical program and breed only people of very high intelligence, we might be worse off than we are now, unless brain could displace brawn more rapidly than it now can.

When intelligence tests are used for selective purposes, it is well to know whether environmental conditions have been eliminating the unfit of the group to be tested. The

use of intelligence tests for the selection of students for admission to college does not result in very high correlations between scores in the tests and the scholastic records. One reason for a low correlation is the selective process that has been operating through the school system. The students of lowest intelligence find grammar school and high school work too difficult for them and tend to drop out according to the degrees of intelligence possessed. Hence, when a student is able to apply for admission to college, he has already survived a process of selection. Only those above the average of intelligence are able to finish high school and apply for admission to college.

This process of selection by accomplishment requirements which is the cause of low relation between intelligence test scores and scholastic record in college is also at work in the selection of business executives. Bingham and Davis measured the intelligence and business standing of 102 successful business men. The relation between intelligence test score and business standing was indicated by a zero coefficient. Business competition had already set the dead line for entrance into the executive field by eliminating those of low or even of average intelligence. Those who had intelligence below the average of the population in general could not hope to become members of this executive group.

The Business Ability Test in the Appendix of this book has no value for the selection of accountants. All the accountants who took the various sections of the test scored very high. The test was too easy for them, because competition had eliminated the accountants who could not attain the minimum of ability represented by that test.

If an individual has a certain minimum of intelligence for a given occupation or job, his success depends upon other characteristics, such as temperament and personality. The intelligence of the executive is merely one of several factors in his composite behavior pattern, as suggested in the chapter on behavior patterns (Chapter III).

Executives who decide to use psychological tests for hiring often want to take the tests themselves. The experience of the writer has been that, if the executive interested in the tests happens to make the highest score of all the employees, he then believes that the tests are good. In those experiences where the executives happened to score lower than one or two employees, the executive lost interest in the use of tests. Such an attitude is wholly unscientific and unsound. If the executive could only realize that the purpose of the tests is to hire employees of a behavior pattern type requiring qualities of a different nature from his own qualifications, he might not be so easily offended or elated over the results of the test procedure.

One of the most frequent criticisms of psychological tests is that they are unfair to the nervous applicants. It is claimed that a person may be in an unusual mood. His digestion may be bad or he may be in a state of worry and therefore not do justice to himself. Experience indicates that very few persons are emotionally disturbed while taking the tests administered by an experienced examiner. Tests may frighten employees and applicants when they are given without the necessary preliminary explanation of their limitations and values. However, when tests are properly handled, very few applicants object to taking them. A person of an especially timid or psychoneurotic nature may object, but such applicants are in a decided minority. In many situations it is not essential to tell the applicant that he is about to take a psychological test. It is better to ask him whether he objects to taking a short examination of his general fund of information or speed in figuring.

Employees who have been tested should not be given their scores. Such results should be kept in the personal file of the chief executive of the firm. As previously stated, if a person has a certain accomplishment level of intelligence, his success and advancement may depend upon

factors which are not measured by the tests. When an employee or lower rank executive is given his own test score and he knows how he compares with other members of the organization, he assumes that those employees who happen to be a few points above or below him are also above or below him in ability or chances for promotion. No tests are available that measure so fine a degree of

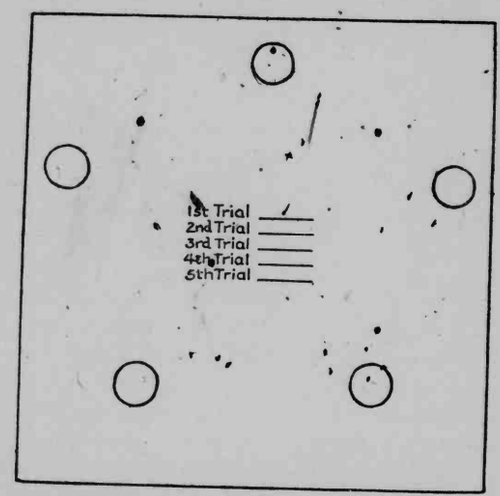

Fig. 18—An example of a character test. Close your eyes. Move a pencil around the square three times without touching the paper. With eyes still closed, try to put a dot in each circle. Do this for each of five trials. You must put a dot in each of the five circles on each trial in order to have a plus score for any one trial. Refer to the Appendix for the answer. Adapted from Cady, V. M., "The Estimation of Juvenile Incorrigibility," *Journal of Delinquency*, Monograph No. 2, April, 1923.

differentiation. Their chief value is that of classifying individuals into broad or general groups.

Experiments are now being conducted with tests of character. Some people are high in intelligence, but of abnormal character. In general, we do find that most socially desirable traits go together. People of high intelligence tend to be of good character, are more beautiful,

easier to get along with, and healthier. However, a high score in intelligence does not prove that a given individual is of good character. It merely indicates that the chances, statistically speaking, are greater that he is of good character than that he is not. Some of the first character tests dealt with practical situations. An example is that of the employer who wanted to hire an honest boy. When the boys appeared to apply for the job, he gave each a dollar and told him to have it changed at a certain drug store. The druggist had been instructed to give each boy ten cents too much in change. Hence, when the boy was given the extra change he could do one of three things: give it back to the druggist, give it to the employer, or keep it for himself. Most of the boys who were tested returned the dime to the druggist. The boys who failed to notice the extra dime were not hired because they were not alert.

Children in school have been tested in deceit by giving them an examination, collecting the papers, making copies of each child's answers, returning each child's papers to the child, giving each a key to the correct answers, and asking each child to score his own paper. The child's own scoring was then compared with the office copies of the scores and definite discrepancies between the two scorings were noted. It was found that some children would correct their own papers while scoring them: some would put dots over the letter "i" when it was a part of the test, others would cross the letter "t," others would write in extra words, and the worst offenders would erase writings in ink and write in the correct answer in pencil. In most of these tests, the amount of dishonesty varied with the degree of motivation. When children were impressed with the tremendous importance of making a high score, they cheated far more than when they were allowed to think that a high score in the examination was of no importance. This is in harmony with the business man's empirical experience. The executive who wishes to hire an employee for a position where, if he chooses, he can manipulate the company's finances for his own benefit does well when he selects a man who lives within his income and saves some money rather than a man who plays the stock market or happens to have a "social climber" for a wife. Our dishonesty tends to increase as the pressure for it increases.

A professor of a summer school course for teachers gave the students a list of books to be read during the summer session. At the end of the course, the students were given a list of titles to books and asked to check all those that they had read. This list contained a number of fictitious titles. It was found that one third of the students checked titles of books that did not exist. It is probable that the number of fictitious titles checked would vary with the personality of the instructor of the course. If an instructor has a manner that indicates leniency, the number of fictitious titles would be less than with a man who teaches the course in an arbitrary or petty manner. Similarly, the business man who conducts himself in an arbitrary and petty manner with his employees is likely to find that his employees will try to hide their dishonest or questionable acts far more than if he is open-minded and frank in his manner toward them.

At present, tests are not available which tell the business man whether an applicant is honest or dishonest. Honesty, like all character traits, is of a complex nature. It varies with the situation. A man may be scrupulously honest about paying his gambling debts and exceedingly lax about paying his room rent. One test will not measure any one character trait, because character traits are specific in their applications to situations. A "battery" or number of tests is needed to measure any one character trait, such as aggressiveness, although Moore and Gilliland got excellent results with an eye-control test. To use this test, select ten persons who are very aggressive, and ten who are not aggressive. Let each applicant, while he adds simple numbers and gives the answers aloud, face the examiner and look him

in the eye. For example: ask him to begin with 38, add 11 to it, and continue to add 11 to each sum, looking you in the eye meanwhile, until you tell him to stop. Have him do this for three trials of one minute each. Count the number of times he shifts his eyes from yours. In the Moore and Gilliland experiment, twenty-six persons were tested. Thirteen were known to be very aggressive, and thirteen to be lacking in aggressiveness. The average number of eye-movements for the aggressive persons was .5, the average number for the nonaggressive persons was 5.5.[6]

Tests of a similar sort have been used in selecting salesmen. The applicant for a selling job is seated at a table before the examiner. The examiner says to the applicant: "Here is a pencil. You are to write your name on this sheet of paper and continue to write, no matter what happens." After the applicant begins to write, the examiner takes his wallet and pushes against the writer's pencil. In one company it was found that the men who threw down the pencil and became angry were poorer salesmen than those who resisted the examiner's tactics. This test has not been standardized sufficiently to prove its predictive value; but it is suggestive of the type of test that will be improved and may become of value in testing character traits, such as persistence in the face of difficulty. This last named test is difficult to score, and a test that must be scored by the subjective estimate of the examiner is less reliable than an objective test.

All tests are limited by the fact that they give a group prediction rather than a prediction for a specific individual. A test that has high positive predictive value means that any one who scores high in the test tends to be high in the trait with which the test correlates. The high score means that, of one hundred persons who score high in the test,

[6] Moore, H. T., and Gilliland, A. R.: "The Measurement of Aggressiveness," *Journal of Applied Psychology*, vol. 5, 1921, p. 97 ff.

a certain percentage will also be high in the other trait.[7] If an employer hires a large number of employees for a specific job, as one does in life insurance selling or factory operations of large standard process shops, a set of psychological tests should be developed for the hiring of applicants; but most American business concerns do not have a large number of employees who do the same work. They have a few stenographers, several bookkeepers, a janitor, an office boy or two, and a larger number of miscellaneous machine operators. Unless the firm employs about fifty persons on the same kind of operation, it is difficult and expensive to develop reliable psychological tests. Even in the larger corporations, it is often arduous to invent profitable tests for more than one or two classes of employees.

Psychologists realize this limitation of tests and govern their decisions accordingly; but the novice who uses tests is apt to apply the prediction to specific individuals rather than to group estimates. In general, group psychological tests do not require a skillful technique in administering them after they have been statistically treated; but to give them statistical interpretation requires more technical application than most business men care to give. Executives should obtain the services of a trained tester if they wish to have any worthwhile results from psychological tests for hiring purposes. This is one reason why tests have been much discussed in business literature, but have been little used.

The psychoanalytical interview.—The statistical interview and psychological test are objective. The psychoanalytical interview is decidedly subjective. The psychoanalysts have developed a technique which enables them to study the emotional life of the patient and discover or

[7] We shall not discuss the meaning of minus coefficients of correlation here, but leave that for the statistician who wishes to have a thorough knowledge of tests. Very few business men have the necessary time or inclination to understand all the modifications of the statements made here. Our aim is to present the facts of value to the business executive rather than give a technically complete discussion. However, the last chapter of this book presents some of the statistical methods of evaluating tests.

uncover the past experiences that influence the behavior of the individual. There is no doubt that the past experiences of a person do influence his impulses and interests. In most cases, the person does not realize what experiences of his past are influencing his adult life. The man who wants to be in the forefront of the group and do the talking, as typified in the Chautauqua lecturer or the preacher, has had certain emotional experiences, perhaps in his youth, that cause him to obtain his ego-satisfactions by exhibiting himself before other people.

The psychiatrist and psychoanalyst can interview a person and note and classify forms of behavior that might escape the untrained interviewer. The person who has a desire to see blood may become a butcher if of low or average intelligence, whereas, if of high intelligence, he may become a surgeon. The "hand-fetishist" may take up glove-making, manicuring, or sculpturing. The person who has an abnormal sexual impulse and wishes to protect himself against it may become a reformer or a detective. The handicap of a physical defect may cause its owner to become an expert in chemistry or accounting. We all try to compensate for our subconscious feelings of inferiority and the psychoanalyst can recognize the means whereby we attain our compensations.

At present, a few firms are hiring psychiatrists for the detection, prevention, and cure of emotional or personality defects. These men note delusions of persecution, tics, irritableness, fluctuations in attention, complexes, and other psychopathological conditions. In the course of another decade or two, they will also become valuable in selecting employees who have impulses that fit them for specific occupations. At this time, we must simply wait until there has been more research, but the interviewer of applicants should become acquainted with this field of human analysis. The chapter on psychopathological conditions (Chapter V), presents a general background for this type of interview.

Letters of application.—Our discussion of the interview would be incomplete without some mention of the letter of application. Carefully conducted investigations show that the letter of application cannot be judged with any great degree of accuracy. If ten employment men are asked to rank twenty-five letters of application, the letter that stands at the head of the list of one interviewer may

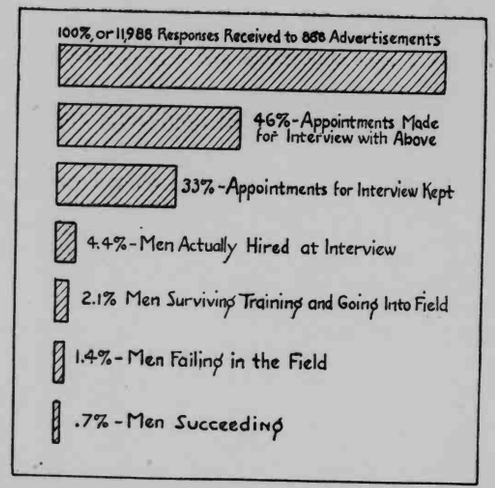

Fig. 19—This chart of the number of responses to advertisements for salesmen indicates an unusually high percentage of responses with a low percentage of successful hirings. The number of worthless interviews can be reduced by presenting definite requirements in the advertisements. (The above chart has been presented so often that the original author was not located.)

be at the bottom of the list of another interviewer. No one executive has the right to assume that he can pick the wheat from the tares in letters of application. He can eliminate some of the decidedly unfit, but when he rates the remainder he is apt to commit serious errors. When a company advertises for applicants, no one executive should eliminate and rate the letters of application. A

group of executives or other persons should select the letters whose writers are to be investigated further.

It is also important that the company advertising for help should give specific details in their advertisements. The following advertisement had been used by one executive who was seeking a combination type of service man and salesman:

MECHANIC wanted who can service electrical appliances. Must also be able to take orders occasionally from customers. He must have a neat appearance and a good personality.

When the advertisement was rewritten as shown below, better and fewer obviously unfit applicants applied to the company:

SERVICE MAN AND SALESMAN wanted who can make repairs on electrical appliances, as washing machines, refrigerators, ironers, and indoor wiring. He must also be able to:

1. Solicit orders from present users of our equipment. He will be paid an extra bonus for such orders.
2. Collect payment on unpaid accounts.
3. Drive a Ford car.
4. Furnish bond, the cost of which is paid by the company.
5. Attend a training course one evening each week.

The persons who qualify will be paid a definite salary; but their ability to sell additional equipment will determine the main part of their income. Advancement to executive positions is possible.

Letters of recommendation.—An instance of the questionable worth of letters of recommendation came to the attention of the writer when employed by a rubber company. An executive had hired a secretary who was exceptionally competent, but was very temperamental. On several occasions he transferred her temporarily to other executives of the company who were friends of his, told them that she was difficult to handle, and asked them to discharge her. The other men refused to discharge her, because they did not wish to withstand the fiery temper of the girl. Finally, the executive who was responsible for her employment decided to have vengeance upon a friend,

employed in another concern, who had beaten him in a poker game. The poker playing friend happened to be an executive in his firm, so the girl was given an excellent letter of recommendation to him. When she applied for a position, her personality impressed him favorably and she was hired, largely because of the excellent letter of recommendation from her employer! This case is exceptional, but it illustrates the fact that many letters of recommendation and many references are given which do not tell the true story of the employee's past record.

A sales manager wrote to 100 sales managers and asked them: "In replying to a letter of inquiry from a prospective employer regarding the fitness of one of your former employees, do you tell only the good things you can say about the man?" Seventy-seven per cent said "yes" and 23 per cent said "no." This indicates that about 8 out of 10 former employers will report the pleasant statements about a former employee rather than paint the complete picture. In this same investigation, to the question, "Do you always give the employee the benefits of any doubts?" 85 per cent said "yes." The third question: "Do you point out the man's failings and weaknesses as well as his strong points?" resulted in 39 per cent who said "yes" and 61 per cent who said "no" or "not usually."[8]

One sales manager who hires salesmen in all parts of the country telegraphs his requests for information from former employers who are given as references by applicants. He has found that he must demand about eight references and follow up each reference very carefully if he wishes to avoid hiring men with bad records. On one occasion he sent telegrams to eight references regarding an applicant whom he wished to hire. Two of the references did not reply at all, but telegrams from four were as follows:

Glad to hear Walter K has applied to you for a position. I

[8] By a New York Sales Manager, "To Whom It May Concern," *Sales Management*, October, 1923, p. 9 ff.

can recommend him highly as regards honesty and workmanship. He is 100%. Has worked for me 3 years.

Walter K was with us for two months. Character and dependability very good. Would recommend.

While Walter K was with us he was very satisfactory.

I recommend Mr. K. very highly in every respect.

These telegrams from the references were quite satisfying to the employment man and he was about to hire the applicant when he received a long distance telephone call from one of the former employers. The former employer described Walter's conduct with his firm and told how he had failed even to attempt to do the work for which he was hired, had led an immoral life, owed the company money, borrowed money from customers, and had been discharged for incompetency. A few hours later, another former employer telephoned the employment man and gave a similar report of gross misconduct. These executives refused to put their reports in writing, but used the telephone in an honest effort to save time and money for a prospective employer. This employment man frequently requests former employers to telephone him at his expense if they prefer to do so rather than write or telegraph him. He claims that he has saved his company thousands of dollars by asking for telephone answers, because former employers will give more honest reports in oral than in written form.

Most executives write a general letter to a person given as reference and the person answering usually gives a general reply, selecting those good points in the applicant's history that may be written without harming his chances for another job. A slightly better method is to use a special rating scale and ask the former employer to rate the applicant on a point scale as:

Rating	*Points*
Excellent	10
Very good	8
Good	6
Fair	4
Poor	2

General character traits, such as initiative, honesty, etc. are listed and ratings are requested. Such a rating form for references is better than a general letter, but it is far more effective to ask for information on specific points as:

1. Was the applicant discharged by you, let go because of decrease in work, or did he leave of his own accord?

2. Does he owe you any money now? *No.* *Yes.*

3. Would you rehire him if you needed a person for a vacancy that he had the ability to fill? *No.* *Yes.* *Possibly.*

4. How long did he work for you?

5. What date (month and year) did he leave your employ?

6. He states that his salary or income from you was .... per month. Is this correct? *Yes.* *No.*

7. Did he use alcohol to any extent? *Yes.* *No.*

8. How do you rate his moral conduct? *Very Good.* *Satisfactory.* *Questionable.*

9. Do you think that he possesses the ability to fill a job with us which is ..... *Yes.* *No.* *Don't know.*

10. How would you rate his record with your firm?
    a. Very satisfactory.
    b. Satisfactory.
    c. Fair.
    d. Questionable.
    e. Unsatisfactory.

The above questions should be made part of a two-page letter to the previous employer, the first page giving the name of the former employee and assuring the answerer that his report will be kept confidential. The questions and answers suggested may be varied, but they should deal with objective factors rather than ask for opinions. The possible answers should be suggested on the form so that the correct answer can be checked by the writer or written with a minimum of effort. This type of letter to a reference does not allow the previous employer to select the pleasant parts in the former employee's record and ignore the bad parts. Such forms have been used by a few progressive firms, but the great majority of employment men still accept from

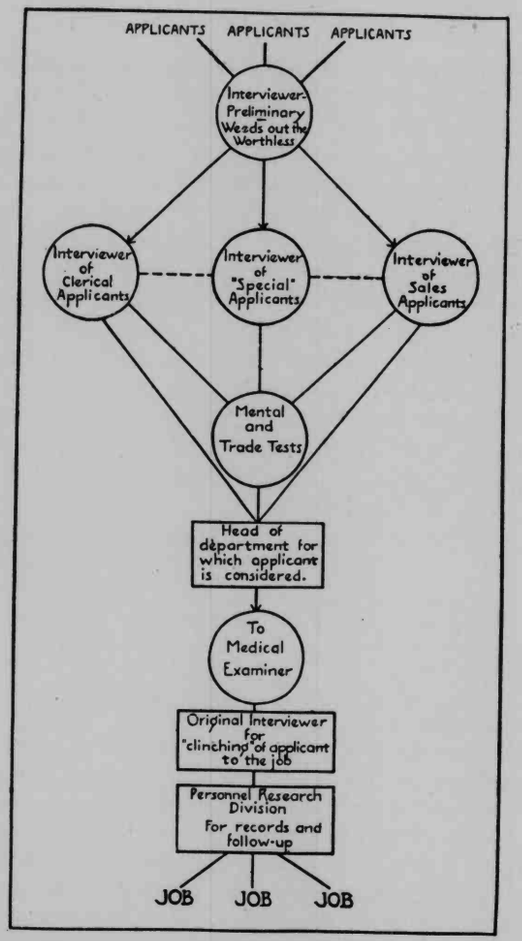

Fig. 20—This diagram presents the procedure used in hiring applicants where a careful study is made of each applicant. The "multiple interview" is used, that is, each applicant is judged by several interviewers. Mental and physical tests are administered. When the applicant is hired the original interviewer tries to explain all the pertinent rules of the company and to "sell" him on the job, so that he will want to give his new employer fair treatment. The research division records the facts of value to the employer and arranges for a definite follow-up of the employee's progress in the company.

persons giving references a general letter of reply. They assume that, when an applicant has a bad record, the person answering will phrase his letter so that it is possible "to read between the lines" and grasp the real story. Such an expectation on the part of executives may be unfair to the applicant and it requires too much time on the part of the previous employers.

When letters are addressed to former employers of an applicant, they should be addressed to the "Employment Manager" rather than to individuals within the company. Some applicants who do not wish their real record to be revealed to prospective employers often give the name of a friend in the company as a reference. This friend is usually a person of no responsibility and his statement has no weight as a reference for a discharged employee.

Summary.—The hiring of employees is still in the hands of the empiricists of business. The old rules of thumb and prejudice prevail. The interview, as it is usually conducted, yields little information of sound predictive value. A few progressive concerns have made statistical studies of the factors which correlate with successful employment records. Some have used psychological tests in eliminating the unfit and reducing labor turnover, but such tests have several major limitations. They require a large number of employees, fifty or more, to be engaged on the same tasks and their predictive value applies to groups rather than to individuals. Their greatest limitation is the scarcity of business men who are willing to study the technical requisites involved in their successful application. However, any executive or employment manager who wishes to improve his hiring technique can do so by standardizing his procedure, keeping records of his findings, and then making careful statistical studies of his records. Such an attempt will yield results more valuable than the present haphazard treatment of the interview, letter of application, and letter of recommendation.

Projects.

1. Prepare a list of associates whom you know. Rank them in order of merit with respect to personality traits, such as initiative, industry, intelligence, etc. Then ask several acquaintances to rate the same persons on the same traits. Compare your ratings. Analyze the differences.

2. Adapt the suggested list of questions in *The Interviewer's Guide* to the needs of a company whose employment problems are known to you.

3. Assume that all the employees of a large bank are to be given several psychological tests. Outline the complete plan of procedure for their administration and use.

4. A sales manager asks you to develop some psychological tests for hiring salesmen. Outline the main steps in the procedure you would follow in attempting to give him what he wants.

5. Try the Moore and Gilliland eye-control test on some friends and record the results. Evaluate the worth of the test for hiring purposes.

6. Collect some letters of application. Ask some friends or executives to rank them in the order of estimated desirability of the applicants. Discuss the differences in the rankings.

7. Rate yourself on the hiring scale of the Phœnix Mutual Life Insurance Company's statistical scale.

CHAPTER X

Promoting the Employee

The writer once had the temerity to suggest to the general manager of a firm having three thousand employees that he ought to have a promotion and training system. His answer was: "Training and promotion? Bosh! Nothing doing. Why, do you know what I did several years ago? I arranged for several training courses to be given, hired the teachers, rented a special room in the center of town, and put a slip in the pay envelopes telling the employees that any one taking the course would be directly in line for promotion and higher pay. The whole proposition was free. I almost begged some to take the training. About 50 per cent of our men are foreigners or too old to take any courses, but I estimated that about 1,200 were capable of benefiting by such courses as I had planned. Of the 1,200 possibilities, how many do you suppose took the courses? Well, you couldn't guess. I'll tell you. Eight started and 2 finished."

The experience of this one manager is not exceptional. Many employees in factories will not exercise the self-discipline necessary to merit important positions. The majority of employees do not seek responsibility. Some must be compelled to accept it. However, office workers, salesmen, and intelligent employees often do desire promotion. When higher grade applicants are hired, they often ask: "Where does this job lead to?" The most frequent answer is one of evasion as, "You do your work well and keep your eyes open and you'll be promoted when you really deserve it."

A more truthful statement to the applicant would be: "We have no well planned system of promotion or advance-

ment. We have never taken the trouble to study our employees and to explain how they can make themselves worth more to us. If you work for us and make good, it may be that, in time, we shall have an opening somewhere in the organization where we can use you. Of course, some one may have to die or leave before you can be promoted, but if you live long enough and work hard enough, you may get there. On the other hand, some one else may appeal more to us than you, and then the other fellow will get the promotion. We think that we know who the good men in our company are, but we do not always know, so that you must make a good impression on someone farther up. You must be able to sell us your ability as well as do good work."

We must recognize that salesmanship as well as ability is often essential to secure promotion. We all know that some men are very able in their fields, but are poor salesmen. Several experiments have been conducted which prove that the employee who is liked by one executive may make no favorable impression on another executive. One executive may admire the enthusiastic type of employee and another may admire the quiet, steady variety. It is obvious that the executive's personality and personal likes and dislikes always will play a large part in promotions, but merit should be the chief consideration. It is also agreed that many executives do make an honest attempt to promote fairly, and on a merit basis.

Executives know that a good employee may be the essence of loyalty to all outward appearances and yet at the same time be looking around for another and better job. Sometimes his seeking for another position is an active campaign and at other times he may be plugging along and keeping one eye open for a possibility. The point that is of significance here is the fact that few, very few, employees really admire their employers. They do not throw themselves whole-heartedly into their work, because the employers do not, as a rule, show each employee his present and future avenues of promotion. The employee should

know his own potentialities or limitations and the avenues of advancement within the company.

Rating the employee.—The promotion chart based upon an analysis of jobs is one phase of a systematic plan of promotion. It is also necessary to know the human beings in the organization, if job and man are to be brought together into an effective articulation. Many important traits of employees cannot be measured by objective tests, but must be estimated by means of rating scales. A rating scale is a method of estimating character or personality.

The benefits of the rating scale.—1. Executives are prone to classify all employees into two large groups: the "good" and the "no-good." The executive may call the "no-good" group "passable," "tolerable," or "just satisfactory," depending upon the mood he is in at the time. Obviously, employees are neither wholly good nor wholly bad, but each has some traits to a high degree and others to a low degree. The use of a rating scale compels the executive to analyze his employees and to obtain a more accurate picture of each person under his supervision.

2. A rating scale also compels an executive to analyze his employees at regular intervals. Many an executive walks by some of his employees every working day for years and never thinks of their specific characteristics. If an employee commits a serious error or refuses to join a labor union, the executive may then hear of the matter and gauge the employee by a single dramatic incident. In most cases, the dramatic incident is an isolated defect of the employee's conduct, because his good qualities are taken for granted. Too many executives are negative-minded toward their employees. They can recite their weaknesses or failures, but are unable to list their positive points.

3. The periodical use of a rating scale discovers the good men sooner and makes them available for the company. These men can be given special training, extra compensation, executive recognition, or opportunities for additional responsibilities or duties.

4. The executive can check or verify his own analyses of employees. If he should rate a man high one month and then rate him low six months later, the cause should be known. Perhaps a trivial incident has changed the estimate of the executive, or he may not really know the employee well enough to rate him. Having a record of his estimates of employees will enable the rater to ascertain his ability to analyze others. His ratings can be compared with those of other executives, and his tendencies toward high or low ratings can be discovered. If an executive is a poor judge of human behavior, the rating scale will cause him to realize his peculiarity.

5. Just as the rating scale enables the executive to improve his ability to analyze the employee, so the employee also learns the particular qualities he should develop or eliminate. Few employees know their own strong and weak characteristics. They do not improve themselves, because the management does not tell them what to improve or how to do it. The "Success" books and pep lectures are too general or too inspirational to enable the employees to make direct and tangible applications to their own jobs.

6. The rating scale gives the soulless corporation a personality that is more tangible than the customary executive neglect. The employee is not a mere number on the pay roll, nor a cog in the big scheme of industry, but a definite personality. A firm that has several hundred employees cannot depend upon chance to know them. A systematic attack must be made to give the workers the recognition that each human being deserves and desires. Friendship or chance meetings at clubs are not necessary when ratings are made regularly. One ambitious employee had difficulty in gaining recognition in his job. Hence, when he learned that the president of the company was scheduled to make a long trip in a Pullman, he arranged to be on the same train, and to occupy a seat near that of the president. While on the train, the president took a liking to the young man and later promoted him. So great an exhibition of diplomatic initiative should not have been necessary to become known to the man who controlled the progress of his employees.

Kinds of rating scales.—The first and poorest form of rating scale is the "Yes"—"No" type, and some are still in use in supposedly progressive concerns. It consists of a set of questions which are to be answered "yes" or "no." The following questions are used to rate salesmen and are part of a list of fifty questions that are on the blank of a corporation having a nationally distributed sales force of several thousand men (X refers to the salesman who is to be rated):

1. Is X a hard worker?
2. Is X a deep thinker?
3. Is X popular?
4. Is X tolerant?
5. Is X tactful?
6. Is X strong willed?
7. How big is X's world?
8. Is X spiritual?
9. Is X self-conscious?
10. Is X loyal?

In spite of the fact that quantitative evaluations may be given the answers, such as 10 for perfect conduct or complete possession of a given trait, this rating form is positively dangerous. No man is either a hard worker or not a hard worker. The rater should not be asked to think in terms of the presence or absence of a generalized trait, but rather in the degrees of possession of the trait. If the general trait is applied to specific situations, then its presence or absence may be noted for those situations.

A more careful attempt to rate employees was the *man-to-man comparison* or *army officers' rating scale*. The officer performing the ratings was instructed to prepare a list of officers of all grades of ability. From this list, he selected persons of typical degrees of ability in a given trait. The names of the typical persons were then written on the "master scale" for that trait. Example of a master scale:
Physical qualities:

Consider physique, neatness, voice, energy, and endurance. Consider how he impresses his men in these respects:

Grade		*Weight*
Highest	Captain Hill	15
High	Captain Richards.	12
Middle	Captain Dorn	9
Low	Captain Hopkins.	6
Lowest	Captain Smith	3

After a rating officer had filled in a master scale for a quality, he could then use it for rating subordinates. The subordinate, Lieutenant Jones, was then compared with the various types of men on the master scale and given a numerical rating of from 3 to 15. After he was rated on all the qualities of the rating system, the various numbers for each quality were added together and a total rating recorded for the subordinate.

One value of this kind of scale lies in its plan of getting away from the 100 per cent habit. Many raters have the old public school idea of rating a perfect pupil 100 and the poorest pupils about 80 or 90. To avoid the 100 per cent habit, numerical rating scales should have a maximum total considerably above or below 100.

The big defect in this kind of man-to-man comparison scheme is not in its intrinsic value, but in the way it is used by the raters. Very few executives will take the trouble to construct a master scale for each quality to be rated. They will assign numerical grades to the subordinates without making the necessary careful comparisons between men. The scheme is too cumbersome for practical use and, moreover, is theoretically defective.

The rectangular distribution scale also compares individuals with each other, but each subordinate is compared with the other persons of his own group only. Example: the department head who wishes to rate his employees by this method simply takes a list of all his employees. At the top of a sheet of paper, he writes the name of his best employee in any specified trait. At the bottom of the sheet, he writes the name of his poorest employee. Then he places all the other employees in their relative positions between the two extremes. If the executive wishes to do so, he can

divide his ranked employees into five main groups, superior, good, average, fair, and poor, and give those in each fifth or quintile a numerical or letter weight as:

Superior	10 or A
Good	8 or B
Average	6 or C
Fair	4 or D
Poor	2 or E

A variation of this method is not to rank the employees in order of merit, but simply to classify them into five groups without ranking the individuals within the group.

The main objection to an order of merit or rectangular distribution system is that all the ratings are made on the basis of a single group. The ratings do not tell the executive how his group compares with other groups of previous years. Employees, as a whole, may be poorer or better in some departments than in others. In school work it is frequently found that one class may be much better or much poorer, as a class, than classes of previous years.

The graphic or adjective-checking scale is shown in Figure 21. This type of scale is the most popular among psychologists and business men. It is more definite than the army officer scale and takes less time than most other scales. However, it is decidedly deficient in certain important respects. Its chief defect is the fact that human qualities are not quite so general as such a scale implies. As previously stated, personality traits are specific. Initiative may be present under some conditions and in some situations, but almost absent in others. Similarly, with self-confidence, honesty, industriousness, coöperativeness, and all other behavior qualities. The ironworker who is self-confident while walking along the beams of a thirty-story skyscraper may be a shrinking violet in the ballroom. Each reader can analyze himself and list certain situations wherein he knows that he is self-confident and other situations where his confidence in himself is almost zero.

One of the most common causes of error in the use of the graphic rating scale is in the definition of each abstract

Fig. 21—Example of a Graphic or an Adjective-checking Rating Scale.

quality. Each quality is defined and these definitions may involve so many different forms of behavior that aspects of the general quality are rated rather than the general quality itself. An example of such a condition is taken from the "Rating Scale for Salesman Applicant," used by a large sales organization when hiring:

Personality and character.—Consider the applicant's (1) ability to express himself, (2) ability to use good grammar, (3) forcefulness of speech and pleasing voice, (4) ability to listen as well as to talk, (5) tact, (6) optimism, (7) general good fellowship, (8) freedom from bad habits, (9) loyalty to previous employers, (10) sincerity, (11) straightforwardness, (12) ability to win confidence, and (13) ability to hold confidence.

It is impossible for any one rater to keep in mind the thirteen aspects of one quality. One rater will rate the applicant on one aspect and another will rate him on one or two of the thirteen aspects of the general quality. Hence, by the mathematics of combinations, it is possible to have 4,096 different ratings of the *Personality and Character* of the same applicant, and each of the ratings might be made by the same rater!

Ratings of general traits do not give worthwhile predictions of the success of applicants. One valuable experiment on the predictive value of such rating was reported by O. R. Johnson.[1] His company had one man who devoted nearly all his time to hiring salesmen and two men who conducted a training course where they became acquainted with the new men. The two instructors taught the new men and had them give demonstrations of their sales canvasses. They had an exceptional opportunity to become acquainted with them and to estimate their ability. In the course of a six months' period, thirty-four salesmen were rated by the two instructors and the man who hired them. Each man made his ratings independently of the other two raters. The following general quality rating was made of each salesman:

[1] Johnson, O. R.: "Is the Sales Manager's Opinion of That New Salesman Worth Anything?" *Printers' Ink Weekly*, Aug. 28, 1924, p. 25 ff.

Quality	*Weight*
Experience	3
Dominance	3
Stamina	2
Appearance and manner	2
Enthusiasm	2
Fluency	2
Egotism	1
Expansiveness	1

After each salesman had been in his territory for two months, a study was made of the predictive value of the rater's estimates according to the eight general qualities. The actual performance of the salesmen, measured in terms of sales, was correlated with the ratings, with the resultant low coefficients of correlation of Table XXII.[2]

TABLE XXII

Agreement between actual performance and A's ratings	.27
Agreement between actual performance and B's ratings	.21
Agreement between actual performance and C's ratings	.16
Agreement between actual performance and the three ratings combined	.16
Agreement between rater A and rater B	.24
Agreement between rater A and rater C	—.20
Agreement between rater B and rater C	.26

The predictive values of these coefficients are so near chance that they are useless. The executive who attempts to hire applicants on the basis of ratings of general traits should not do so unless statistical investigations demonstrate the reliability of his method.

The above and other general quality rating scales deal with abstractions. The psychologists were compelled to discontinue the study of the mind, as such, and to confine their efforts to objective behavior traits. Executives who rate their employees must do the same thing. They should not think of their employees in terms of general abstract qualities, but rather in terms of the behavior of each employee in specific situations. To overcome the defects inherent in the general quality rating scale, the *specific behavior scale* has been designed for use in several corporations where the management wished to deal with definite characteristics of the employees.

[2] *Ibid.*

The specific behavior scale consists of a list of the concrete situations or various limited forms of behavior that an employee should have or should not have. This list is longer than that of any other kind of scale, but it is answered just as readily and just as easily. To find whether strangers would answer a request for a detailed rating of 143 items as readily as a typical graphic rating scale of a few items, two groups of persons of fifteen members in each group were asked to furnish a list of references. A graphic rating scale, having eleven general qualities, was sent to each of the references of one group. This graphic scale had the customary spaces:

List some of his weak points.....

.....

List his strong points.....

.....

Another rating scale, having 143 specific items for checking, was sent to each of the references given by the other group of fifteen persons. The following table [3] presents the results of the two kinds of scales:

TABLE XXIII

COMPARATIVE SUMMARY OF GENERALIZED RATING SCALE AND SPECIFIC ITEM SCALE

(Fifteen persons rated with each scale)

	Graphic scale with 11 general qualities and no specific or definite items	*Specific behavior scale with list of 143 definite items*
Total number of raters who answered	92	94
Total number of characteristics mentioned by one rater only	356	767
Total number mentioned by two raters	17	146
Total number mentioned by three raters	7	47
Total number mentioned by four raters	2	19
Total number mentioned by five raters	1	10
Total number of items regardless of number of raters mentioning the item	424	1326

[3] Hepner, Harry Walker: "Better Judgments of Men," *Industrial Psychology*, January, 1926, p. 24.

TABLE XXIII *(Continued)*

COMPARATIVE SUMMARY OF GENERALIZED RATING SCALE AND SPECIFIC ITEM SCALE

(Fifteen persons rated with each scale)

	Graphic scale with 11 general qualities and no specific or definite items	*Specific behavior scale with list of 143 definite items*
Average number of items mentioned for each of the 15 persons rated	28.3	88.4
Average number of items mentioned by each rater	4.6	14.1

It is evident that the persons who were asked to make the ratings on their acquaintances were just as willing to check a form having 143 items as to check the graphic scale form with only 11 general abstract qualities. Furthermore, the scale with the specific list of items gave a more accurate picture of the person rated. If an item was checked by two or more raters, it was a reliable indication that that item applied to the person rated.

SURVEY OF OUTSTANDING TRAITS

Name of Person to Be Analyzed.....

The purpose of this blank is constructive.

Very few people know the characteristics in which they are strong. Nor do they know the ones in which they are weak. This blank is to be filled in by five or more individuals who know the person mentioned above.

The person mentioned above has requested this survey in order to enable him to understand himself better. The data which you and his other raters give him will be summarized and then given to the person rated. He will not know what any one person has said of him, because all the data will be mixed into one summary. Therefore, you can feel free to be frank, because you will know that your statements will be confidential.

You need not fear that you may be prejudiced for or against the person rated, because any prejudices will probably be counter-balanced by the other persons who rate him.

As you will note, the points to be considered are divided into two lists: *Positive or Commendable Traits* and *Negative or Improvable Traits*. It is realized that no person in existence has all or even most of the commendable traits. Nor is it expected that any person should have all of them. We also realize that each person has some of the improvable traits. However, if the person rated knows what his good points are, he may then be able to utilize his good points to greater advantage. Likewise, if he knows the improvable traits, he can then improve or compensate for them.

Try to think of the outstanding characteristics of the person whose name is given above.

Check or underline the points which you believe to apply to him. You can check as many or as few items under any heading as you wish. If you want to make any additional comments on some items, write them in the margin.

POSITIVE OR COMMENDABLE TRAITS	NEGATIVE OR IMPROVABLE TRAITS
PHYSICAL CHARACTERISTICS	
Has very good health.	Should improve his health.
	Bad breath.
Very calm in emergencies.	Certain muscles twitch.
	Bad odors about person.
Has lots of energy on the job.	Should show more energy and pep.
	Goes to pieces in emergencies.
APPEARANCE	
	Should
Dresses very neatly.	Be more cleanly in person.
	Shave more frequently.
Good facial expression.	Improve facial expression.
	Use less cosmetics.
Always makes a good appearance.	Press clothes more frequently.
CONVERSATION	
	Should
Uses very good grammar.	Improve grammar.
	Talk more.
Carries on conversation well.	Do less talking and more listening.
	Improve tone of voice.
Has very good sense of humor.	Be less solemn and more humorous.
	Be less sarcastic.
Is enthusiastic.	Be more enthusiastic.
	Argue less.
Speaks well of others.	Speak well of others more often.
	Talk less about own interests.
Retains company matters to self.	Keep company matters to self.
	Look people in eye while talking.
Can talk to all kinds of people.	Try to talk to all kinds of people.
	Listen more attentively.
Listens attentively.	Improve vocabulary.
	Omit pet phrases such as.....

POSITIVE OR COMMENDABLE TRAITS	NEGATIVE OR IMPROVABLE TRAITS
MANNER TOWARD OTHERS	
	Should
Is very tactful.	Try to be more tactful.
	Be less easily persuaded.
Understands human nature.	Learn more about human nature.
	Select better companions.
Mixes pleasure and work properly.	Attend more social affairs.
	Attend fewer social affairs.
Always greets people with a smile.	Smile more often.
	Not assume air of independence.
Shows right amount of appreciation.	Express appreciation more often.
	Be less familiar.
Can see the other fellow's views.	Try to see all sides of a question.
Never borrows money for trivialities.	Borrow less money.
Has very good manners.	Study social etiquette.
MENTAL EFFICIENCY	
	Should
Attacks work systematically.	Work more systematically.
	Pay more attention to details.
Good memory for names of people.	Determine to remember names.
	Get more general knowledge.
Good memory for company facts.	Remember facts about work.
	Learn more about certain subjects such as .....
Always seeking new ideas.	
ATTITUDE TOWARD SELF	
	Overestimates his worth.
Has proper respect for self.	Should
	Not look down upon himself.
Controls temper well.	Control temper.
	Be less sensitive.
Troubles make little impression.	Think less about own troubles.
	Make less effort to be in limelight.
Stands up for what he believes right.	Stand up for own ideas.
	Be less self-conscious.
Accepts criticism in right spirit.	Realize that criticisms are to help not to hurt.
MORAL TRAITS	
Believe him absolutely honest.	Doubt honesty under pressure.
	Should
Consider him very dependable.	Stop dissipating.
	Be more dependable.
Conversation is clean.	Control animal nature.
	Use less profanity.
CONDUCT ON THE JOB	
(If you, the rater, have little knowledge of his work, check only those items that you know.)	
	Is not loyal to his company.
Seldom loses time off job.	Should
Does more than just necessary.	Take less time off the job.

POSITIVE OR COMMENDABLE TRAITS	NEGATIVE OR IMPROVABLE TRAITS
Coöperates with superiors.	Do more than absolutely necessary.
Coöperates with everybody.	Coöperate with everybody.
Handles employees well.	Not fear the boss.
Popular with fellow-employees.	Try to please other employees.
Does not side step blame.	Do less "visiting" at work.
Handles responsibilities well.	Accept blame when it is due.
Works without "crabbing."	Seek more responsibilities.
Works overtime without request.	Not "crab" about the work.
Gets work done on time.	Do his share of overtime.
Does work very accurately.	Try to get to work on time.
Turns out large quantities of work.	Improve accuracy.
Uses head on the job.	Turn out more work.
Makes many good suggestions.	Think more about *how* to do work.
Difficulties do not stop him.	Make some suggestions for work.
Very loyal to the company.	Not let difficulties stop him.
Gets to work on time.	Improve handwriting.
Concentrates well.	Waste less time on job.

Add any additional items which you think might be of value to the person rated. Explain any points which might be misunderstood.

.....

.....

For what kind of work do you think that this person is best fitted? Or how might he increase his chances for advancement?

.....

.....

NAME OF PERSON MAKING RATING .....

PLEASE SEND THIS BLANK IN A SEALED ENVELOPE, TO.....

.....

The chief value of ratings which are made on specific characteristics rather than general qualities is that they enable the executive to give the employee definite suggestions as to what he should or should not do. To tell an employee that he should improve his appearance is not so effective as to tell him that he should shave more frequently or press his clothes regularly; or to tell him that he should be more industrious is not so effective as to ask him to do less "visiting" in the office or to come to work on time. When abstractions are rated and the supervisory executive wishes to have an intimate advisory talk with a subordinate, he usually sermonizes to the employee. However, if he has

definite items to discuss with the employee, the latter will know just exactly what he should do to improve his chances for promotion.

General principles for using and making ratings.—Some of the principles stated may appear to be dogmatic and academic; but experience in the use of ratings and a desire to avoid technical dissertations warrant the brevity of the statements.

1. *The purpose of ratings is constructive rather than critical* so far as the employee is concerned. Many executives who use ratings for the first time give the employees the impression that they are being spied upon. Employees do not like to be analyzed merely for the benefit of the employer. They resent being catalogued. They do not want to be analyzed and then labeled and forgotten until the company needs a person of their classification. Employees suspect that ratings are merely a device for getting rid of those who are not up to the required standard of efficiency. Therefore, rating scales should not be applied in any organization unless the employees have had an adequate explanation of the purposes of the ratings. They should be told that the company wishes to help each employee to help himself, that sermons are not to be preached, but rather that the management wants to give the employees who desire it definite help and counsel in obtaining a promotion through merit. If the executives can rate the employees without their knowledge, well and good. However, very few companies can conduct systematic ratings without the knowledge of the employees, and, if it is not done openly, the employees will soon spread rumors of spies and detectives having been hired to catch them in any negligences or petty infractions of rules. The better plan for the management is to put all the cards on the employees' table, explain the ratings, their constructive purpose, and then rate only those employees who wish to be rated.

2. *Ratings should be used* when they are gathered. If the company records the ratings on the personnel records

of the employees, some benefits can be derived. When a promotion is to be made, the executives do not have to make snap judgments. Ratings should be filed in advance of any emergencies. But their greatest worth may be obtained through a friendly discussion of the ratings with each employee. The executive should point out the strong points in the ratings, ignore those traits that are of no importance to the employer, and plan a definite program for the utilization of the positive qualities of each employee.

3. *Capitalize the strong qualities* of each employee. The negative-minded executive finds it easier to dwell upon the weaknesses of employees than to emphasize their good traits. Most human beings are too conscious of their defects. The tables of psychological problems of Chapter I of this book indicate that the opinions and criticisms of others are the outstanding worries of normal people. And yet, human beings do not advance through consciousness of their defects, but rather through the use of their strong qualities. The counselor of the employee should try to show him how to make use of and capitalize his commendable qualities. The negative traits should be overlooked unless they have a direct bearing on the employee's value to the company. It is well to remember that every great man had some defects; but that he became famous or successful because of his positive qualities, not because of his weaknesses.

4. *The qualities to be rated should be objective,* and should deal with reactions to tasks and impersonal situations. Investigations indicate that subjective traits and reactions to people cannot be rated with accuracy. However, such traits can often be expressed in objective or impersonal form. The following lists indicate objective and subjective traits:

Objective traits that can be rated	*Subjective traits and reactions to people that cannot be rated*
Talking about himself.	Egotism.
Moral conduct.	Moral attitude.
Output.	Loyalty.

Objective traits that can be rated	*Subjective traits and reactions to people that cannot be rated*
Speed of work.	Personality.
Accuracy of work.	Intolerance.
Originality.	Fair-mindedness.
Carefulness.	Agreeableness.
Time spent in study.	Charm.
Talkativeness.	Power of will.
Leadership record.	Conceit.
Use of English.	Cheerfulness.
Punctuality.	Beauty.
Control of temper.	Sympathy.

5. *Ratings should be based upon past accomplishments rather than upon what the individual may be able to do in the future.* It is important to know what a person may be able to do, but we must judge the future by the past. When necessary to make predictions concerning the future possibilities of an employee, it is well to do it on the basis of all the known information of the employee—ratings, years of service, production, age, attitude toward the proposed new job, etc. In large organizations it is also well to have rating scales adapted to the various kinds of workers. In most firms, it is necessary to have four different rating forms—one for the factory workers, one for the executives, one for the salesmen, and one for the office workers.

6. *Only those who know the employee should rate him.* It may sound absurd to specify that strangers to the individual should not rate him, and yet, in many firms, it is difficult to find persons in executive positions who know all the employees of large departments. If necessary, ratings may be made by supervisors or even by fellow employees. In a department store, the rating made by a floorman is apt to be more accurate than that made by a buyer. A buyer has so little direct contact with the sales clerk that he does not know him from every angle. Teachers are often asked to rate students or former students, but their ratings should be limited to the classroom contacts and should not include the many outside activities. When a teacher has a large class he seldom becomes acquainted with the students. Occasionally, he does have direct associations with a student

in his home or on the athletic field and then the classroom estimate may be modified very decidedly. The ratings made by ministers and doctors have little value, because they know people under limited conditions only. Few of us conduct ourselves normally when in the presence of preachers and physicians.

7. *Employees should be dealt with on the basis of more than one person's ratings.* No matter how impartial or intelligent the rater may be, he is apt to commit serious errors, because of the special conditions under which he deals with the ratee. The rater is also conditioned by his own childhood experiences and has certain unconscious prejudices that will influence his ratings in spite of his effort to be fair. To prevent unfair and erroneous estimates, it is necessary to have three persons rate each employee. If the specific behavior form of rating scale is used by three or more raters, then only those items checked or underlined by two or more raters should be recorded for the employee. If only one rater attributes a trait to an employee, that trait should be disregarded, as it is not indicative of the group estimate.

8. *Ratings do not tell the management what an employee actually is or does.* They show what the group thinks of the employee. However, in many situations, the attitude or estimate of the group is more important than what the person is or can do. If an applicant for a job gives people the impression that he is dishonest or incompetent, they will treat him according to their estimate of him rather than according to his actual qualities. When tests can be given the applicant or employee, it is better to do so than to use ratings, because ratings are a substitute for the measurement of qualities for which no tests now exist. In the course of time, scientific research may produce tests that will be more accurate and objective than our present recourse to group estimates.

9. *The "halo error" is common to all ratings.* The general impression of an individual markedly colors our

evaluation of his specific traits. If a person impresses us favorably in a general way, or because of some specific quality that we know he possesses, or because of an outstanding experience with him, we then tend to invest his entire personality with a luster that causes us to overestimate his desirable traits and underestimate his undesirable characteristics. One executive was asked why he rated a certain employee so low in all traits. His answer was to the effect that he did not like people who have small mouths and the particular employee had a small mouth. Some previous experience caused small mouths to become associated with the undesirable kind of personality and this experience colored his estimates of people who had that incidental trait. As we all know, if we like a person, we attribute all good traits to him. Conversely, if we dislike him, we tend to assign to him all negative traits.

10. *The rater may know the ratee too well.* The uninitiated assume that the longer the acquaintance of the rater with the ratee the more valuable the ratings. This principle holds true only to a certain point, and then the longer the acquaintance the less accurate the estimates. A study was made of the ratings of 1,048 public school teachers, in which it was found that the teachers who had been known for a long time were overrated. In "general efficiency," of those known less than one year, only 10 per cent were rated excellent; of those known from one to seven years, 47 per cent were rated as excellent; and of those known from eight to twenty-five years, 68 per cent were rated excellent. Dr. F. B. Knight, the author of this study, offered several explanations.[4] One might say that teachers gain in ability as they increase in experience, but studies of the effect of length of experience upon skill in teaching suggest little relationship. Furthermore, when teachers are rated as to "physical efficiency," the same trend is found, and we could hardly accept the principle that physical efficiency increases with age. The results can be explained more satisfactorily as influence of the acquaintance factor. A supervisor of teachers would not like to admit that the teachers under him did not improve with length of experience with him. An example of familiar statements of supervisors is: "Teacher A was pretty poor when I got her, but I have developed her into a first-class teacher."

[4] Knight, F. B.: "The Effect of the Acquaintance Factor upon Personal Judgments," *Journal of Educational Psychology*, 1923, vol. 14, pp. 129–142.

Unconscious identification might also be accepted as an explanation of the older teachers being rated higher. "One superintendent asked each principal to give the name of his best teacher and state why that teacher was best. Principal A gave as the reason for the superiority of his choice, 'He is a he-man.' Principal B gave as the reason for superiority of her choice, 'She holds up high ideals before her pupils.' Principal A is an ex-athletic director. Principal B is a vigorous Sunday school teacher. Identifying superiority in teachers with the judge's pet hobby seems to be operating here."

Knight also suggests the factor of negative adaptation. We all get used to people. Teachers who have annoying mannerisms soon cease to irritate us and become accepted, whereas the new teacher is more or less on trial. Trivial discrepancies in behavior on the part of new teachers, because they do not "know the ropes," may influence the supervisor's rating far more than efficiency or inefficiency in the classroom.

We might also suggest the tendency of the older teachers to adapt themselves to the idiosyncrasies of the supervisor. The new teacher may not know that the supervisor dislikes the teacher who smokes cigarettes and commits the error of doing so in his presence. The older teachers know the particular peculiarities of the supervisor and adjust their conduct accordingly. Certainly, an important factor in the advancement of an employee is the knowledge and capacity to accept the imprint of the superior officer. Graduate students in universities realize that they must

adapt themselves to the whimsicalities of the major professor who happens to be the key man in determining whether the candidate shall receive the coveted advanced degree. Supervisory executives may pride themselves upon their fairness and impartiality toward subordinates; but it is highly probable that only a few would find ample reasons to promote an employee who openly disagreed with them in political, religious, and athletic interests. The older employee knows the hobbies and beliefs of the supervisor and agrees with them, or, at least, remains noncommittal on thorny differences.

When length of acquaintance is a matter of hours, days, and months, the longer acquaintances probably result in better ratings; but when it becomes a matter of years, the longer acquaintances are detrimental to accuracy of ratings. Another experiment indicated that we should not only ask the rater, "How long have you known the person to be rated?" but also, "How well do you know the person to be rated?" [5]

Job analyses for employment and promotion purposes.—To promote employees systematically requires several general steps:

1. Know the employee: ratings, tests, past record, etc.
2. Know the jobs in the organization: the one the employee is now holding and the ones to which he might be promoted if he were qualified.
3. Interview employees periodically, so that the man power may be utilized for the benefit of employer and employee.

There are several kinds of job analyses, depending upon the purposes for which the analyses are made. The most common variety is that of the industrial engineer who analyzes jobs for the improvement of working processes and methods. He prepares, through time and motion studies, performance standards which show him how much

[5] Shen, E.: "The Influence of Friendship upon Personal Ratings," *Journal of Applied Psychology*, September, 1925, pp. 66–68.

work an employee should produce and the best way in which to produce it. The job analyses of the psychologist or personnel man are for their human relation values in selecting new employees; in promoting, transferring, discharging, and training present employees; and in the establishment of health and equitable wage standards. In this discussion, we shall give emphasis to job analyses for purposes of promotion.

Strictly speaking, a *job analysis* is simply an abstraction for a variety of operations made by the analyst. It is the process of collecting the information about the jobs of a company. A *job* or *occupational specification* is a written statement of the facts obtained in the job analysis. The job specification has two main parts—description of the job, and description of the qualifications of the ideal person to fill the job. The written report or estimate of the qualifications of the ideal person to fill the job should not be confused with the qualifications of the person who is actually on the job. The person who now holds the job may or may not have the desired qualifications.

The job analysis procedure usually begins by preparing a work sheet whereby the analyst can go into the shop or office and obtain the pertinent facts of the jobs in the organization. The analyst takes a supply of the work sheets to the department head or foreman and explains the purpose of the job analysis. By discussing the work and the kinds of jobs of the executive's department, the analyst obtains a general idea of the activities of the jobs and the relationships of the jobs which he is about to analyze. The employees on the several kinds of jobs are then interviewed and the work sheets are filled in in preparation for the typing of the complete job specification. When the data have been collected, written on the work sheets, and arranged in logical order, the revised work sheets or job specifications are then taken to the responsible department head for correction and approval. In most cases, some corrections must be made. The data on the corrected work

sheets are then typed on the final work sheet, which is now considered to be the job specification, as it includes the qualifications of the ideal person to fill the job. One specification is made for each kind of job in the organization.

TYPICAL WORK SHEET FILLED IN FOR A JOB SPECIFICATION

(R for required. D for desired. X for items that apply to job.)

GENERAL:

Name of Position—In Charge of Suggestion Division. Symbol.....
Dept.—Better Letters Bureau. Div.—Suggestion.
No. in Position—1. Number of Subordinates—2.
Immediate Superior—Manager Better Letters Bureau.
Time Required for Inexperienced Person to Learn Work—3 years.
Time Required for Experienced Person to Learn Details of Work Here—18 months.

QUALIFICATIONS

R Male	D Married	Age Limits—27 to 40	Beginner
Female	Single		R Experienced
			Expert

EDUCATION:	*Common*	*High School*	*College*	
Required—None 6 7 8		I II III IV	A B C (D)	Desired.....

Courses Required—Psychology, English.
Courses Desired—Salesmanship, Better Letters, Office Manager's Course, Factory Course.

EXPERIENCE:

Required—On Policy and Product. 1 year in Division as Assistant.
Desired—Office Manager, Salesman, Newspaper Work.

Manual	Meets Public	x Desk	x Indoors
Clerical	xx Meets Employees	Standing	Outdoors
Correspondence		Stooping	
x Promotional	x Plans Broadly	x Walking	Travels Much
x Supervisory	x Attends Details		xx Travels Little
Technical		xx Varied	
Research	Major Responsibility	Routine	Artificial Light
Managerial	x Medium Responsibility	Automatic	x Natural Light
Executive	Minor Responsibility		

DESCRIPTION OF JOB:

1. State duties of supervision and responsibility. 2. Operations in work. 3. Occasional duties. 4. Machines and appliances used. 5. Relationship to other jobs.

Works under supervision of Manager of Better Letters Bureau. Is responsible to the Board of Control for making a preliminary survey of all suggestions submitted by employees of the General Offices, branches, and service stations; for tactfully informing employees of action taken in regard to their suggestions; and for the proper publicity of the suggestion system.

Eliminates only those suggestions which are obviously of no value; the others are investigated as to their worth and reviewed by the Suggestion Committee (a committee of three men, the man in charge of the Suggestion Division having an equal vote with other two members). All decisions are subject to review by Board of Control at any time.

Submits a detailed report every week to Board of Control showing in regard to suggestions: the number submitted, their value, the departments affected, reason for action taken, and a résumé of each.

When a suggestion is received it is copied on a standard form and sent to qualified members of the organization who report its worth. Follows up these investigations to see that contents are made so that Suggestion Committee can make an intelligent and tactful reply to every person who submits a suggestion.

The guide for classifying the jobs or master job—classification chart.—When the job specifications have been completed for the various jobs in the organization, each job must be graded or zoned. The purpose of the zoning or grading of the jobs is to determine the relative value and importance of the jobs in the company. The guide for classifying the jobs is a description of typical grades of jobs in the company. This classification chart is a kind of scale which will enable the management to grade the jobs, determine upon the salary ranges for each zone, and prepare promotion charts for the development of the individual employee. Wage or salary studies can also be made of all the jobs in the company, as some employees who receive a Grade 4 salary may be doing Grade 5 work or vice versa.

GUIDE FOR CLASSIFYING JOBS

Grade 8. DEPARTMENT MANAGER. Salary range: $333 mo. and up.
Is responsible for the efficient operation of a department:
- a. Interprets and executes company policies relative to department.
- b. Initiates and executes departmental policies.
- c. Coördinates activities of divisions and actions of the department.
- d. Coördinates activities of his own department with the activities of other departments.
- e. Originates and puts into effect procedural changes in departmental activities.
- f. Passes approval on all departmental expenditures.

Intelligence: Superior (A or B on Army Alpha).

Grade 7. DIVISION HEAD. Salary range: $250-350.
Is responsible for the efficient operation of a recognized division:
- a. Plans and carries out divisional activities.
- b. Coördinates activities of sections and employees of the division.
- c. Originates, and, upon approval of department head, puts into effect procedural changes in activities of the division.
- d. In division having specialized functions of a staff nature is responsible for and assists in making investigations, preparing special

reports on subjects, such as sales, markets, industrial plants, etc.
e. In division having operating function is responsible for the operation of the division, such as discipline of employees, planning and scheduling their work, and preparing routine reports.

Intelligence: Superior (A or B).

Grade 6. SPECIALIST. Salary range: $200 and up.
Under supervision of a department or division head,
investigates, analyzes, recommends, and prepares reports on subjects mostly of technical nature, such as markets, sales, finance, employment, inventions, company organizations, industrial plants, etc.

Intelligence: Superior (A or B).

Grade 5. SENIOR CLERK OR CORRESPONDENT. Salary range: $175-225.
Performs varied clerical work requiring high intelligence, involving any or all of the following:
a. Directs other clerks doing work related to his own.
b. Prepares reports from complicated data which is unassembled and must be digested and analyzed.
c. Authorizes, under general supervision of supervisor, orders, such as shipment of advertising literature to dealers.
d. Conducts correspondence which is incidental to clerical duties, such as answering inquiries and adjusting complaints from customers and branches.
e. Uses mathematics which involves a thorough knowledge of use and principles of trade formulæ.

Intelligence: High average (C+).

Grade 4. GENERAL CLERK. Salary range: $140-175.
Performs varied clerical work, which requires average or above average intelligence, involving any or all of the following:
a. Gathers data without direct supervision for reports from files or from company employees. Reports are inspected and signed by a superior.
b. Writes letters to branches over own signature on subjects of a routine nature or prepares letters involving company policies for signature of superior. Answers those inquiries of a simple nature only.
c. Investigates matters of clerical nature for superior.
d. Uses arithmetic, such as percentages.

Intelligence: Average or High Average (C or C+).

Grade 3. UTILITY CLERK. Salary range: $110-140.
Performs clerical work of a semiroutine or repetitive nature, involving any or all of the following:
a. Gathers data for reports from files under the direct supervision of higher grade clerk or superior.
b. Inspects card or other records for accuracy by comparing them with data which is not in same form as that of the record.
c. Sorts data topically and prepares it for transcription.
d. Answers telephone or personal inquiries which involve a knowledge of records and files.
e. Sends form letters to branches requesting information.
f. Uses simple arithmetic.

Intelligence: Average (C).

Grade 2. JUNIOR CLERK. Salary range: $65-110.
Performs such minor clerical work of a routine or automatic nature involving any or all of the following:
a. Files correspondence of cards alphabetically.
b. Transcribes data from temporary to permanent records.
c. Sorts and assembles cards or papers in a numerical or alphabetical order.
d. Posts noncomplicated data to proper cards or records.
e. Checks lists with master lists.
f. Answers telephone and refers to a superior all questions on phases of work except those of a very simple nature.

Intelligence: Average (C).

Grade 1. OFFICE BOY. Salary range: $40-65.
Runs errands, delivers messages, sorts and distributes papers, and does other miscellaneous work.

Intelligence: Low Average (C—).

If the management wishes to succeed in increasing the efficiency of the individual employee, some responsible executive must know the nature and grade of the job of each employee. He should be able correctly to evaluate any job in relation to the other jobs in the organization and in relation to the jobs in other industrial concerns. It is very easy to overestimate the importance of low grade jobs and to underestimate the higher grade jobs. Example: when an employee says that he is "Clerk on the Outgoing Requisitions of the Purchasing Department" it may mean that he is a little higher than the office boy or it may mean that he is an assistant purchasing agent. By means of the guide for classifying jobs and the job specification, any job may be properly classified as to grade or zone of importance. Such a guide or master job classification chart was made by the writer for the 1600 general office jobs of a large rubber concern and is shown on pages 253-255.

One aid in binding employees to the company is to have a clear-cut promotion system which any employee can understand. Even though an employee may not be interested in becoming anything other than what he is, yet a concern which has a promotion system rates higher in the estimation of the employees than the firm where promotions are mysterious things that seem to be acquired by

Fig. 22—This organization and promotion chart is an example of the conventional point of view regarding systematic promotion systems for employees. This type of chart is becoming obsolete, as it has been found that employees do not fit grooves that are so fixed as these. A more flexible system, as shown in Fig. 23, is necessary to fit the needs of the employee and the employer.

the "lucky fellows with a pull." Children go through school by doing the work of the specified grades. Promotion is systematic. Each child has a definite scholastic goal before him. The method of getting into the next grade is known to all pupils. In industry, the method of getting into a higher job is largely a mysterious thing about which nothing definite is understood. The promotion chart takes the mystery out of promotions. Most promotion charts of the past have been drawn up very elaborately and have shown how any employee must follow certain very definite lines of travel in going from the bottom to the top. The "railroad track" schemes of promotion, as illustrated in Figure 22, do not work out under actual conditions, because human nature is adaptable. The employee adapts himself to the job and adjusts the job to his limitations.

The fact that a youth happens to be the office boy in the purchasing department does not mean that he must become a purchasing agent in order to use his native capacities. It is rather probable that he might become the head of the mail order department or assistant to the traffic manager. In many large concerns, one does not find that the general manager has had production, sales, finance, and other forms of business experience, but rather that he has come from some other, and often an unrelated, field. The reason why a lawyer can be a good general manager is not because law gives him the training he needs, but because the lawyer has high *general intelligence* and can adapt himself to managerial requirements. The same factor holds true with the rank and file of employees—the ones of high general intelligence, industry, initiative, etc., could advance equally readily in any one of several departments rather than in any particular department. The old idea that a man is fitted for only one particular occupation is not accepted by the psychologist. We find, rather, that each man is equally well fitted for several things and not perfectly fitted for any one of the several. Human beings are adaptable, and any scheme of promo-

tion must recognize the factor of adaptability. It should, therefore, be possible to promote an employee from one grade of job in Department A to a higher grade of job in Department B. To develop men, promotions should be interdepartmental as well as intradepartmental. Employees should be allowed to see the promotion charts. One large concern has found it desirable to post the pro-

Grade					
8			Manager of Advertising Department		
7		Head of Copy Division		Head of Media Division	
6	Chief Copy Writer	Publicity Man	Dealer Service Man	Market Research Man	Space Buyer
5	Copy Writer		Dealer-Correspondent	Statistician	Ass't. Space Buyer
4	Stenographer Grade A		Ass't. Correspondent		
3	Stenographer Grade B	File Clerk		Record Clerk	
2	Typist		Letter-Service Clerk		
1	Duplicator Operator		Office Boy		

Fig. 23—The above promotion system has been found more successful than that of Fig. 22. To prepare the above type of chart, the jobs are analyzed and graded according to importance to the company. It is not assumed that an employee must follow definite channels of advancement, but an employee in a lower grade of job can advance to *any* job of a higher grade. This allows for the elasticity in the needs of the employer and the employee.

motion chart for each department on the wall of the office where the employees are working.

The development program of each interested employee.—In a majority of modern concerns, most employees have already reached the limit of their capacity. Some employees recognize this and are contented. Others do not realize their limitations and picture themselves as sales managers or factory managers. This latter group must be handled very tactfully, and, inasmuch as they really are seeking some means of self-expression rather than responsible managerial jobs, the counselor of the personnel must explain these facts to the employee and help him to express his individuality in some manner which fits his capacity and circumstances.

A certain percentage of the employees, as shown by the ratings and job specifications, will be found capable of greater achievement. These are the employees most worthy of attention and are the ones which the company will need most in the future. The executive in charge of personnel should try to understand and appreciate these employees and outline a plan of development for each one of this group.

The number of executives in business who have interviews with their employees for the purpose of helping each employee to develop himself is small indeed. In fact, such executives are exceedingly rare. Moreover, when an executive does have a talk with an employee regarding his future development, the executive practically never clinches his counsel. The employee usually leaves with a vague or generalized set of platitudes which are of no practical value. The one thing which must be done to vitalize the interview is to help the employee to outline a definite development program so that he will know just what he should do in order to merit promotion.

An example of an employee development program is given in Figure 24.

Very few executives have the time, the ability, or the inclination to interview their employees and plan a program of training for each ambitious employee. For this reason, it is best to concentrate such individualized personnel work into one man's hands, such as the personnel counselor, and then hold him responsible for results. When the labor turnover in any department is excessive, this personnel counselor should be able to give an acceptable reason for it, even though it may not be within his province to correct it.

EXAMPLE OF AN EMPLOYEE DEVELOPMENT PROGRAM

Employee's background:

Age 38. Married. College graduate. Present position that of assistant to the general manager. Has had 2 years of factory and 5 years of sales experience. Has been in supervisory and technical work in the offices for 6 years. Greatly interested in people. Good social poise. Jovial. A leader in the Boy Scout movement and one fraternal organization. Enjoys reading on all subjects. Subscribes for 8 business and semiscientific magazines.

Goal:

Prepare for work of Personnel Counselor in an industrial concern having 2,000 factory workers and 250 office and sales employees.

Development program:

A. Read the following books:
   1. Craig and Charters, "Personal Leadership in Industry," McGraw-Hill Book Co.
   2. Laird, Donald A.: "The Psychology of Selecting Men," McGraw-Hill Book Co.
   3. Hollingworth, H. L.: "Judging Human Character," D. Appleton & Co.
   4. Salisbury & Jackson, "Outwitting Our Nerves," The Century Company.
   5. Tead and Metcalf, "Personnel Administration," McGraw-Hill Book Co.
   6. Kitson, H. D.: "The Psychology of Vocational Adjustment," J. B. Lippincott Co.

B. Practice of the analysis of men by analyzing several. Use psychological tests and other methods. Take the data to a university psychologist and let him criticize it.

C. Get into touch with several men in other concerns who have had experience in analyzing and handling men and find out what they do and how they do it.

D. Have dinner with key executives of our own company and discuss with them the individualizing of the relationship between employer and employee. Sell them on the idea.

E. Draw up a plan of employment office procedure for one year.

Fig. 24—The program given above is for an unusual type of individual and job. In most cases, the program would deal with the taking of correspondence or night school courses, the reading of certain books, the interviewing of certain men, and the correction of personality defects.

The executive in charge of promotions, training, or personnel should put his suggestions in writing. A duplicate

copy of the program outlined for each employee should be kept in the files of the counselor, and, when the next interview is held with the employee, the counselor should find out what progress the employee has made. If changes in the program are desirable, they should be made, but the employee should be able to give a satisfactory explanation for the changes.

The question of costs naturally arises when an individualized employee promotion program is considered. The cost, however, is comparatively small, because the personnel counselor would be a staff expert and his work would be done through the regular organization. The cost would be that of salaries for the counselor and a combination stenographer-clerk. The materials used would be inexpensive.

The chief value of such a personnel program lies in the fact that it individualizes the relation between the employer and the employee and puts the relationship on an economic rather than on a group philanthropic basis. Most writers who discuss personnel work hark back to a description of the guild system when each worker knew the master personally. This is supposed to be the ideal system, because the modern impersonal relation between the corporation and the employee was absent. The scheme set forth in this chapter is one means of individualizing the relation between the large corporation and the employee, in order that the relationship shall not be paternalistic, but economically and psychologically sound. The ambitious employee does not want managerial sermons or copybook maxims about how to become a big business man. He needs definite and organized counsel regarding the action he should take in order to deserve and achieve a feasible promotion. An inventory of personnel should be as important as a physical inventory.

Example of a Report of an Employee Development Interview.

Employee R.—This man is small in stature, of an expressionless face, graduate of an engineering college, slovenly in dress, and speaks in monotone. Now working as a kind of schedule clerk where he tells the employees about the next job that is to be done. Mr. R. is not an executive nor a supervisor, but performs the office work involved in low-grade engineering. The work of the employees is under the supervision of a foreman.

The executive in charge of his work is a very masculine, outdoor type of man who is dissatisfied with him because of his personality rather than because of inability to do the work. He wants Mr. R. to "snap out of it" or he will be transferred or discharged. Mr. R.'s ratings of ability to do his work were satisfactory, but his personality ratings were low. He had planned to become an executive in charge of large construction work, but his raters did not attribute executive qualities to him. It was suggested that he plan to become an expert in the purchasing or stores department and specialize rather than generalize. After a friendly talk with him, he agreed to carry out the following program:

1. Tell someone a humorous story each day.
2. Take a course in voice training so that he may inflect his words and give his personality more strength.
3. Practice change of facial expression before a mirror when alone.
4. Read books relating to purchasing of construction materials, trade journals of his own field, and finish a technical correspondence school course that he had paid for and started but allowed to drop.

His manner is too agreeable and meek. The particular emotional experience that has given him this manner of inferiority could not be uncovered and it was decided to allow him to adjust himself by preparing for a nonsocial job of a technical nature rather than encourage him to continue in his present plans to become an executive. Of course, his desire to become an executive was a kind of compensation for his inferiority.

Projects.

1. Examine several graphic rating scales for general traits, as initiative, personality, etc. Select the traits that are objective in nature and those that are reactions to persons. Select several general traits and break them down into the specific forms of behavior to which they may apply.

2. Construct a "specific item" scale for the rating of employees of a firm whose personnel problems you know.

3. Construct a work sheet for the analysis of jobs within a company whose personnel problems you know. Analyze a specific job and describe it on the work sheet.

4. Describe the differences between a job analysis work sheet and a blank for the application of employment.

5. Grade the various jobs within a department or company and prepare a promotion chart for the employees who have the jobs. Suggest definite forms of training for the employee who wishes to be promoted to some definite job on the promotion chart.

6. Interview and study an employee and prepare a "Development Program" that seems to meet his situation and desires.

CHAPTER XI

Choosing a Vocation

Predicting the Individual's Own Behavior

The problem of vocational misfits.—One of the pioneers in the field of vocational guidance became interested in the work, because he met a boy who worked in a bird store during the day, studied architectural drawing at night, but had an ambition to become a sea captain. We all know of similar persons who are heartily dissatisfied with their jobs; many others who accept their daily grind, because they do not know what else to do; and a few who are mildly enthusiastic about their work. A letter was sent to a general list of readers of *Collier's Weekly*, wherein the writer told the reader that he had just changed his job and asked the questions: "Are you satisfied with your present occupation?" and "If you could start over again, what occupation would you choose?" Of the 99 answers to the first question, 46 gave an unqualified "yes," 24 gave an unqualified "no," and 29 qualified their answers in various ways. Of the 29, 14 appeared to be discontented and 15 were pretty well satisfied. If we are to judge by the answers to the first question, the vote stood 61 to 38 in favor of the correspondents being contented with their present jobs and stations in life.

However, to the second question, only 35 stated more or less enthusiastically that they would take the same jobs over again. This would indicate that instead of having a 61 to 38 vote in favor of complete contentment we have a 64 to 35 vote against it. That is, about 64 per cent of the group had a preference for some other occupation than the one they were in. Only two replies indicated that the

writers thought primarily in terms of money. The dissatisfied individuals seemed to want something more than money.[1]

The above-mentioned investigation was a study of the rank and file of the population. Kitson made a study of the biographical histories of the first 1,000 of the 25,000 eminent persons listed in "Who's Who in America" (1919-1920). He found that 164 persons made 252 changes in their vocations. A person was considered to have changed his vocation only when he went clearly out of one field into another. Insufficient information was given in 836 of the histories, so we do not know the extent to which they changed occupations. The following table[2] indicates the ages at which the reported changes were made:

TABLE XXIV

AGES AT WHICH VOCATIONAL CHANGES WERE MADE

Age	*Number*	*Per Cent*
Below 15	7	3
15–24	71	28
25–34	89	35
35–44	54	22
45–54	20	8
55–64	9	3
Over 64	2	1
	252	100

Kitson found that almost one-third of the reported changes were made before the age of 25 and two-thirds before the age of 35. This suggests that most of these successful persons had settled upon a satisfactory vocation before the approach of middle age. However, since one-third of the changes were made after the age of 35, changes in middle and later life are fairly common. We must also note that some changes in occupations are probably beneficial and natural. A doctor who becomes interested in public health can make a logical and easy step to politics.

[1] Duffus, Robert L.: "Are You Happy in Your Job?" *Collier's Weekly*, June 7, 1924, p. 10 ff.

[2] Kitson, Harry Dexter: "The Psychology of Vocational Adjustment," p. 47, J. B. Lippincott Company, 1925.

The university teacher of chemistry may pass on to chemical research in a corporation. But the fact remains that a great deal of vocational shifting is constantly taking place, and much of this shifting might be avoided with benefit to society, the employer, and the individual.

When we turn to the earnings of salesmen in business, we find that the cost of shifting is quite high. The Newark Automobile Trade Association made a complete investigation of the earnings of dealers' salesmen. The records of 21 dealers were studied, and it was found that, for every dollar the dealer paid to salesmen each month, the man employed a year or more got 44 cents, the man hired within the year got 32 cents, and the man who left the firm received only 24 cents, of it. The figures also showed that 72 salesmen who had been with a dealer for a year or more selling low-priced and medium-priced cars sold as many cars as 297 salesmen who had been with the same dealer for less than a year. Pay-roll figures for one dealer showed that the average income of all salesmen employed for at least a year was $5,261.29, whereas the men who were employed for less than a year earned an average annual rate of $3,487.32. The investigation also gave evidence that less than one-quarter of the salesmen selling low-priced and medium-priced cars remained with the same dealer more than a year. Almost half of them resigned or were discharged within the year. The turnover among the men selling higher-priced cars was less—only about four out of ten men hired remained less than one year.[3]

TABLE XXV

FACTORY WORK FORCES CLASSIFIED ACCORDING TO LENGTH OF SERVICE
(Total for all periods of service = 100.)

	Survey	*Date*	*Number of Companies*	*0–1 Yr.*	*1–5 Yrs.*	*5 Yrs. and Over*
1.	U. S. (Metropolitan Life)	1928	74	21.5	40.8	37.9
2.	Bridgeport, Conn.	1928	30	24.3	43.1	32.8

[3] "Earnings Study Shows Cost of Salesman Turnover," *Sales Management and Advertisers' Weekly*, June 16, 1928, p. 1045 ff.

TABLE XXV *(Continued)*

FACTORY WORK FORCES CLASSIFIED ACCORDING TO LENGTH OF SERVICE
(Total for all periods of service=100.)

	Survey	*Date*	*Number of Companies*	*0-1 Yr.*	*1-5 Yrs.*	*5 Yrs. and Over*
3.	Massachusetts	1927	25	15.7	38.8	45.5
4.	Michigan	1928	62	25.4	47.5	27.1
5.	New Jersey, Total	1928	548	22.3	42.0	35.7
	Northern New Jersey		443	22.9	41.4	35.7
	Southern New Jersey		105	19.6	44.4	36.0
6.	Wisconsin	1928	424	26.8	38.7	34.5
7.	Weighted Composite †			21.5	41.2	37.3

A study of labor turnover of 1,711 factories gave evidence of a great deal of shifting among industrial employees. The per cent of employees who had remained with one employer one year or less was 21.5; from one to five years was 41.2; and five years or more was 37.3. The Policyholders' Service Bureau, Metropolitan Life Insurance Company, conducted a study of the length of service of employees in 1,711 factories. This study was undertaken with the cooperation of Associated Industries of Massachusetts; Manufacturers' Association of Bridgeport, Connecticut; New Jersey State Department of Labor; University of Michigan, Bureau of Business Research; and the Wisconsin Industrial Commission. The Metropolitan survey covered nearly all the industrial states, but included only seventy-four companies.*

Basic principles in choosing a vocation.—Few problems have been discussed so much and are still so far from solution as the problem of vocational guidance. The writer once attended a three-day national convention on vocational guidance and listened to about twenty speakers who emphasized the need for vocational guidance, but only two suggested methods by which it could be attained. These two were a surgeon who had to aid maimed patients

† To arrive at these averages each plant was given the same weight as every other. In combining the several areas to obtain a general composite, each section was weighted according to its industrial importance as determined by the Census of Manufactures of 1925.*

* "How Long Do Employees Stay?" *Executive Service Bulletin*, Metropolitan Life Insurance Company, March, 1929, p. 3.

in rehabilitating themselves and a Y. M. C. A. lecturer on the subject. Most of those attending the convention were scientists, teachers, and social workers, but none of them presented any method to aid the vocational flounderers. Of course, the main reason why few methods of vocational guidance are actually presented to the public is that science has made little progress in the solution of the problem. Most of the publicity that has been given the youth of America and the misfit who seek vocational adjustment has been sold by the pseudo-scientists—the phrenologists, astrologers, and character analysts. They have already been discussed in preceding chapters and, needless to say, they should be avoided. It is better to allow chance to govern the destiny of a youth than to have him fall into the hands of ignorant charlatans who promise everything and do nothing.

The great mass of the people in the past who have had to follow some kind of occupation did so as a result of chance. And chance here, as elsewhere, is simply another name for the influence of a large number of unknown factors. Chance will have to continue to play the major rôle for some generations to come, because science must make many discoveries before we can foretell absolutely the future of a youth. We shall probably never reach "that day when men's biographies can be written in advance." However, the man who is dissatisfied with his vocation, or who is at the threshold of his economic life and must choose an occupation, can be given some helpful suggestions.

Several important basic facts should first be fixed in the mind of the person who is seeking vocational guidance for himself or is trying to counsel others who are misfits. One of these basic facts is that "the square peg and the round hole" idea is an erroneous smile. This expression implies that the human being is vocationally fixed and unchangeable in his nature. It also implies that the occupation is rigid in its requirements. On the contrary, human beings

Fig. 25—An example of occupational adaptation. These pictures show the radius and the ulna of a leather-stitcher 46 years old. For 27 years he stopped the fly-wheel on his machine by grabbing it with his right hand, the wheel running at right angles to his body, and clockwise. Note the marked bends in the bones of the arms. The human body can adapt itself structurally to the requirements of our civilization. We are not born to any particular occupation but adapt ourselves to the requirements of the chosen occupation.

INTENTIONAL SECOND EXPOSURE

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are very adaptable. Consider the record of man's progress through the ages and note the many adaptations he has had to make. Few of us would choose the life of the cave man, and yet, if conditions demanded it, many men could meet the demands of primitive life in a highly successful manner. Few of us choose the trade of the skilled artisan; but, if a sudden industrial upheaval demanded it, we could become blacksmiths and carpenters just as readily as salesmen, teachers, and lawyers. Each man who goes into any vocation must adapt himself to some extent; and he, in turn, also modifies the job to fit himself.

We are not fitted by nature for one occupation and one only. It is probable that most persons who are now successful in any one field could also become equally successful in some other occupation. No one is perfectly fitted for any one vocation, but all of us are partially fitted for several occupations. The choosing of a vocation means that we must choose the one that requires the least amount of adjustment and gives us the greatest amount of personal satisfaction. Very few individuals are "born" to any vocation. A person of high intelligence who has had a favorable previous environment could take up and succeed in at least a dozen fields, unless one of those fields required some special organic quality, such as the ability to hear a wide range of musical notes or to distinguish between shades of colors. However, limitations of the sense organs or motor equipment are exceptional in modern vocational adjustments.

So far as we now know, the brain does not at birth have certain neural pathways for specific vocational functions. Nor do such pathways develop in the brain except as the environment brings them about. Of course, we again exclude such native endowments as qualities or limitations of the sensory apparatus. The great majority of persons who are in doubt as to the vocation to be chosen could pick any one of several and succeed equally well in any one of the several.

One important factor that most seekers of vocational guidance prefer to ignore is the need of occupational studies. Any person who is in a quandary about his vocation would do well to make a systematic investigation of a number of occupations. The selecting of the vocation is only one-half the problem of vocational adjustment; the other half is that of occupational study.

Vocational decisions must be made continuously. An individual cannot make a single decision that will settle his vocational future. Rather, he must make a series of decisions, not only as to the kind of work he shall do, but also as to the kind of training he shall acquire, the place of training, the job he shall seek, and the manner in which he shall advance in his chosen field. As he develops ability in a given occupation, he must choose the phase in which he shall specialize. And, later in life, he must decide upon the kind of activities that will give him the greatest amount of self-expression. Occasionally, he must decide upon the factor that shall be construed as success or failure for him; whether his objective shall be happy associations with his children, opportunities to influence the lives of others, fame, or wealth. The selection of this objective cannot be made at the beginning of life, but must be decided as time brings about new situations and conditions. Not only does the individual change, but society, business, and occupations change. The occupations which are important in one decade may be of little consequence in the next decade. The progress in aviation and the automobile industry could not be foreseen twenty years ago.

The writers of romance on the stage and in fiction have given people the impression that, if the youth does not happen to find the right mate, he will be destined to years of unhappiness with a shrew. And, later in his life, some kind providence will readjust the universe to satisfy the predestined scheme of things and allow him to live happily, though briefly, with the one mate that fate ordained that he should have. This kind of destiny-teaching is the oppo-

site of the truth. It is true, rather, that any man could live as happily with any one of ten thousand women as with many of the other nine thousand nine hundred and ninety-nine. Likewise, no one person is born for any occupation. Nor should we think that, if an individual fails to find his one niche in life, he will be doomed to a life of failure or mediocrity. No one should be continually looking for a "niche." If he is, it is quite probable that he never will find it, because each man must make his own.

Nor should we seek to follow the vocational pathways that some other successful individual traveled. Much as we admire Lincoln, none of us can be like him or do what he did. We can hope only to make a place in life for ourselves which we can fill as well, proportionately, as he filled his. The man who hears of how some relative, classmate, neighbor, or friend has become wealthy or happy and then attempts to follow in the same footsteps is apt to find that his feet do not fit those footprints. When the college student reads of the Wall Street youth who became a millionaire by plunging into finance and then attempts to follow that same pattern, he is likely to find that finance is not so greatly to his liking as he thought it would be. We cannot take the personality and conditions of some other individual and superimpose them upon ourselves. Each man must hack out his own career for himself and in his own way rather than by imitating a predecessor. He cannot even imitate, as a rule, his own father, unless the successful father gives the son so great a head-start that it is difficult for the youth to fail. This rule also implies that the boy who goes to "dad's alma mater" just because his father happened to go there should realize that times have changed, and that his needs may not be the same as those of his father when he was young. The vocational advice of relatives and friends is likely to be defective in this and many other respects.

The vocational advice of parents and friends.—Well-meaning friends will tell a youth about an uncle who

bought and sold western eggs in carload lots and became immensely wealthy. The next friend may advise him to go into the storage battery business because a young fellow from his home town did that and "he's gettin' along tolerably well." The vocational guidance given by many teachers, employment managers, preachers, and lecturers is in the same class as the home remedy of the friend who never studied medicine or the human body. The physician, with all his years of training and experience, makes many errors in diagnosing our bodily ills, but the untrained friend who tries to do so makes many more.

If a person is in need of vocational guidance and asks some of his friends for suggestions, he may be surprised to find that each person's advice differs from that of all the others. Many friends can give only general and trivial suggestions which are of but slight value. A case study was made of each of a number of adults who voluntarily sought vocational guidance. To assist in the analyses, each one of the subjects gave personality rating blanks to several persons, six or less, who knew him well. These six friends were to check on the rating blank the items that applied to the person being rated. After the items had been checked, the blanks were mailed directly to the counselor. An analysis of the rating blanks for 36 ratees as filled in by the 191 raters resulted in the following table:

TABLE XXVI

Traits	*Percentage of 191 raters who listed the trait in their ratings*
Learn to do things that you dislike	26
Control your temper	21
Be more patient	17
Be less nervous	17
Smile more often	16
Be more tactful	15
Think less about your own troubles	16
Do not sulk when things go wrong	16
Be more enthusiastic	14
Improve your vocabulary	13
Learn to talk to all kinds of people	13
Be more aggressive	13

TABLE XXVI *(Continued)*

Traits	*Percentage of 191 raters who listed the trait in their ratings*
Learn more about human nature	13
Be less sensitive	13
Shave more frequently	9
Improve your table manners	6
Don't tell shady stories	5
Prevent your halitosis	2

In addition to the above, many other characteristics were mentioned by the friends of the advisees; but this table will be sufficient to illustrate the nature of the suggestions of the friends who rated the individuals. Some helpful suggestions were given, and the ratings gave a composite picture of how the person rated appeared to the raters. The ratings were a group estimate of the individual, and, in some cases, suggested avenues for further psychological exploration. The main deficiency in the ratings of these persons who sought vocational guidance lay in the poverty of helpful suggestions regarding any specific occupations which the ratee should enter. Ratings, by their very nature, are subjective and are limited by the past experiences of the rater.

The logical question arises: when the psychologist analyzes a person for the purposes of vocational guidance, how does his analysis differ from that of the acquaintances who know the individual? Chiefly, the psychologist supplements his subjective estimates with objective tests. The tests which he uses have been standardized on thousands of individuals and are fairly accurate, so, if two psychologists test the same person, their findings will be the same. The psychologist also tries to find the specific channels through which the intelligence expresses itself, as in mathematics, music, mechanics, social contacts, and so forth.

An example of the value of the testing services of the psychologist may be shown in the case of a high school boy of a western New York high school who was sent to the commercial teacher by the principal. The principal told

the teacher that the boy was of low intelligence and could not do good school work. The quality of the boy's work in all his courses was of such a low grade that the teachers had given up all hopes of teaching him. Because the other teachers were tired of the boy, he was sent to the new commercial teacher of the school. This teacher also found that the boy's reputation for poor work was correct so far as commercial subjects were concerned. He was the poorest student that this teacher had met in that school.

Fortunately, the commercial teacher had had courses in mental testing, and he gave the boy several intelligence tests just to find out whether his intelligence was as low as it appeared to be. To the teacher's surprise, the boy scored slightly above normal in all the tests. The teacher then gained the boy's confidence and found that he had a serious inferiority complex. One of his teachers whom he had had four years previously had convinced him that he was a "dub and a dumb-bell." After that he made no effort to do good work, but rather tried to live down to the kind of reputation he was given. The commercial teacher changed the boy's attitude and he is now doing good work in all his courses, because all his teachers know that he can do good work and require him to do it. The boy also happens to have unusual manual dexterity and is rapidly becoming an expert typist.

Methods of choosing a vocation.—Some of the current methods whereby the individual can predict or tries to predict his own behavior for vocational adjustment have been mentioned, but we shall list the more common ones:

1. Pseudo-scientific schemes. These have no value and need not be discussed further.
2. Choose a problem to the solution of which you can devote your life.
3. Analyze yourself according to some systematic plan and make a decision.
4. Have yourself tested with the few valid psychological tests now available.
5. Recognize the psychoanalytical influences of your life.

6. Allow yourself to be made a case-study by a vocational psychologist.

One of the best ways for the intelligent person to choose a vocation is to select a problem that needs solution. The modern scientific expert often does this and develops his interest in a problem into a vocation. A girl who was a student in a college of home economics found that the lowly mushroom had never been studied carefully. She then decided to make a study of mushrooms and, when she was graduated, she was offered an excellent position where she utilized her interest in mushrooms. Inventors often use this method. So does the man who sees a need for some particular kind of business in his community and then starts a business to answer that need. Thousands of problems in all the professions and businesses are awaiting solution. The man who determines to devote his efforts to the answers to economic and social difficulties usually finds that he has found his vocation. A few of many such problems are listed as suggestions and not as a complete list:

1. Work out better systems of stock ownership in corporations which sell goods to the general public, so that the customers will share in the profits of the concerns from which they buy.

2. Put into effect a program to abolish poverty.

3. Study and correct our present system of government, so that all public officials will have to be competent and honest.

4. Create a public sentiment whereby manual labor will be considered more honorable and desirable.

5. Develop, through propagation, certain prolific weed plants into valuable food plants.

6. Work out and install better systems of training and promotion for employees of large concerns.

7. Work out better systems of wage payments to employees.

8. Much of the money now spent for advertising is wasted. Some one should discover the laws of advertising, so that all money spent for advertising will be well spent and productive.

9. The feeble-minded tend to propagate more rapidly than the normal people. Is this really a problem and can it be solved?

10. Reduce cost of building homes. Too large a percentage of income of the average American is spent for rent.

11. Make a comprehensive study of transportation with a view to lowering the costs of marketing goods, by allocating production, by improving existing methods of transportation, or by developing new methods of transportation.

12. Find out how to make the public school work more interesting, more cultural, and more related to life.

13. Consider storing electricity in smaller batteries, so that electric automobiles can be made practicable.

14. Preventive medicine is now coming to the fore. The Chinese doctors are paid only when the patients are well. Do we need more of the preventive system of treatment in this country?

15. Many persons die or suffer unnecessarily because of lack of physical development and exercise. Work out plans that will give the office workers more exercise.

16. Unemployment insurance is conducted in some countries. Work out a system that will enable the unemployed to live without want.

17. Bring social and civil centers to rural communities.

18. Develop better methods of settling difficulties between capital and labor.

19. Work out methods for improving the personal efficiency of all classes and kinds of persons.

20. Teach and help people of this country to understand and appreciate art—the beautiful things of life as well as the practical.

21. Discover the basis of personality and help others to improve their personalities.

22. Make child-bearing return to a more normal state.

23. Study the problems of modern housekeeping. Try to make it easier and less expensive. Educate women in the best methods of housekeeping.

24. At present our educational system is adapted to the average child. Some cities pay special attention to the back-

ward or poor student. Evolve a system that develops the exceptionally bright student to his utmost. Much of this latent ability is now being wasted.

25. Religion is in a different environment from what it has been heretofore. Some think that we must put religion on a basis that will appeal to the people of this age.

Self-analysis.—Many of the first attempts at vocational guidance required the youth to answer a long series of questions regarding his vocational interests. He was asked not only to state whether he liked, disliked, or felt a neutral interest in listed occupations, but also to estimate himself in general traits as:

Are you aggressive?
Are you industrious?
Do you have a pleasing personality?
Are you neat in habits?
Are you conceited?
Do you coöperate with others?
Do you look ahead?

Hollingworth and others have made studies of the reliability and accuracy of self-estimates of general traits. He conducted experiments wherein the individuals in a group rated the other members of the group and themselves in nine different traits. The results indicated that people cannot rate themselves with any great degree of accuracy. The natural expectation would be that we tend to overestimate ourselves in desirable traits and underestimate ourselves in undesirable traits. The following data [4] from his study of the estimates of fifty people show the presence of a factor of constant bias in self-estimation:

TABLE XXVII

SHOWING CONSTANT TENDENCIES OR BIAS IN SELF-ESTIMATION

Trait	*Per Cent Overestimating Themselves*	*Per Cent Underestimating Themselves*
Refinement	80	20
Humor	78	22

[4] Adapted from Hollingworth, H. L.: "Judging Human Behavior," D. Appleton & Company, New York, 1922, p. 52.

TABLE XXVII *(Continued)*

SHOWING CONSTANT TENDENCIES OR BIAS IN SELF-ESTIMATION

Trait	*Per Cent Overestimating Themselves*	*Per Cent Underestimating Themselves*
Intelligence	68	32
Sociability	68	32
Neatness	50	50
Beauty	50	50
Conceit	48	52
Snobbishness	36	64
Vulgarity	34	66

Hollingworth also found that, the more admirable the trait the closer the relation between possession of the trait and the ability to judge it in others. His subjects who had reprehensible traits could not rate themselves very accurately in those traits. Of course, we must bear in mind that people cannot rate others accurately in generalized traits, and Hollingworth's experiment assumed that the group estimates of the raters were correct. The consensus of opinion of the acquaintances who did the rating was accepted as the true impression that an individual made on others. As pointed out in the chapter on interviewing, we found that close acquaintance with new salesmen did not enable the instructors to estimate their actual sales ability. It is also quite probable that, if objective measures had been available of Hollingworth's subjects in the nine traits he studied, they would not have agreed with the average ratings of the acquaintances.

Allports' experiment confirmed the principle that self-estimates in general traits are not accurate. Different people were asked to estimate their own intelligence by the rating scale method, and they were also given intelligence tests. Then their self-estimates and their scores in the tests were compared. Those who were high in intelligence tended to underestimate themselves and those who were low in intelligence tended to overestimate themselves. The correlation between self-estimates of ability and scores in the Otis Group Intelligence Test was −.67. Self-estimates are not reliable, unless they can be proved to be of

sound predictive value. To prove their value requires careful statistical treatment, which has not yet been given for most traits that are considered in vocational self-analyses.

Even though self-estimates are not reliable, they may have some value in causing the individual to grade and recognize his own inclinations, tendencies, and characteristics in relation to an occupational choice. In some cases, it may be well for the individual to decide upon his personal likes and dislikes and to try to avoid those occupations that require traits that are definitely unpleasant or to seek occupations that require traits that are pleasant to him. For example, some people dislike to handle other people physically, which is necessary in the work of the osteopath, the chiropodist, the barber, the nurse, and the hairdresser.

Recently job analyses of approximately 2,000 different jobs were made and a list of 80 personality traits and factors that might be considered in making a vocational choice was compiled from these analyses and is given here. The first 62 traits can be expressed in the degree to which the person has each trait. Each of these traits—1 to 62—has examples of several occupations in which that trait may be utilized. The answers to factors 63 to 80 may be underlined or written in the blank spaces. The self-estimates of some of the traits can be verified or checked by the use of objective psychological tests. Traits that have *A* after the numbers can be checked by means of a test of abstract intelligence, such as the *Otis Self-Administering Test of Mental Ability.* Traits that have *S* after the numbers can be checked by tests of social intelligence, such as *The Social Ability Test* in the Appendix. Traits having *M* after the number can be checked by a test of mechanical aptitude, such as the *Stenquist Mechanical Aptitude Test.*[5] Traits having *B* after the number can be checked by means of *The Business Ability Test* in the Appendix.

[5] The Otis Self-Administering Test of Mental Ability and the Stenquist Mechanical Aptitude Test can be obtained from the World Book Company, Yonkers, N. Y.

OUTLINE FOR VOCATIONAL SELF-ANALYSIS

	Traits	*Examples of Occupations That Utilize the Trait*
1.	Desire for popularity	Actor, preacher, politician, golf instructor.
2.	Desire for the quiet simple life	Farmer, statistician, researcher, chemist.
3.	Desire for social pleasures	Dancing instructor, tourist conductor, consular service.
4.	Desire for independence	Business of own, manufacturer's agent.
5.	Desire for money	Avoid jobs of limited responsibility.
6.	Desire to be an expert	Professional, consultant, but may be found in any field.
7.	Desire to make a permanent contribution	Science, industrial research, reform.
8.	Desire to be of service to humanity	Applies to all legitimate fields.
9.	Strong ambition	Where years of preparation are required as in the professions.
10A.	Liking for mental activity	The professions, office work, sales, science.
11A.	Breadth of interest	Advertising, ministry, library, journalism.
12A.	Liking for the theoretical	Professions, commercial research, science.
13A.	Originality of ideas	Inventing, systematizer, industrial engineer, advertising.
14S.	Pleasing personality	All social vocations, such as selling and ministry.
15S.	Liking for all kinds of people	Politician, salesman, social worker.
16S.	Interest in human nature	Salesman, psychology, child training, teacher.
17S.	Hospitality	Association secretary, hostess.
18S.	Handling persons physically	Barber, nurse, masseur, dentist.
19S.	Handling persons mentally	Sales, executive, teacher, advertising.
20S.	Gregariousness	Factory, journalism, selling.
21S.	Sympathy for others	Social work, welfare work, law.
22S.	Ability to withstand persuasion	Purchasing agent, buyer, lawyer.
23S.	Ability to persuade others	Selling, consulting engineer, writer.

OUTLINE FOR VOCATIONAL SELF-ANALYSIS (*Continued*)

Traits	*Examples of Occupations That Utilize the Trait*
24S. Ability to stand criticism	Politician, clergyman, lawyer.
25S. Ability to make others laugh	Comedian, cartoonist, humorist.
26M. Mechanical ability	Mechanic, jeweler, optometrist, inventor.
27M. Invention of the material	Inventor, architect, engineer.
28M. Disregard for cleanliness of work	Agricultural, industrial, and mechanical work.
29M. Manual dexterity	Dentist, magician, pianist, engraver.
30B. Bargaining ability	Buyer, commission house, pawnbroker.
31B. Liking for handling money	Cashier, collector, car conductor.
32B. Liking for business mail	Direct-mail advertising, printing.
33. Artistic ability	Artist, sculptor, layout man, decorator.
34. Musical ability—vocal	Actor, choir, Chautauqua work.
35. Musical ability—instrumental	Orchestra, band, church, stage.
36. Religiousness	Ministry, Y. M. C. A., missionary.
37. Self-reliance	Detective, forest ranger, surveyor.
38. Liking for physical activity	Mechanical and agricultural work.
39. Interest in the mysterious	Spiritualist, psychoanalyst, writer.
40. Conversational ability	Salesman, preacher, politician.
41. Ability to write effectively	Editor, fiction writer, advertising.
42. Ability to speak in public	Lecturer, teacher, preacher, lawyer.
43. Liking for competition	Business of own, politics, selling.
44. Calmness in emergencies	Aviator, chauffeur, detective.
45. Speed of thinking	Accountant, cashier, lawyer.
46. Liking for broad work	Promoter, college professor, executive.
47. Liking for detail work	Chemist, librarian, C. P. A., engineer.
48. Venturesomeness	Explorer, aviator, detective.

OUTLINE FOR VOCATIONAL SELF-ANALYSIS (*Continued*)

Traits	*Examples of Occupations That Utilize the Trait*
49. Need for supervision	Work for some other person or firm.
50. Adaptability to varied conditions	Welfare work, selling, exploring.
51. Liking for irregular hours	Doctor, salesman, agriculture.
52. Liking for accuracy	Research, accounting, engineer.
53. Liking for variety	Professions, printer, advertising.
54. Liking for things of quality	Exclusive shops, art, design.
55. Liking for outdoors	Agriculture, salesman, bricklaying.
56. Interest in plants	Landscaping, seed-grower, florist.
57. Interest in animals	Veterinarian, hunter, apiarist.
58. Liking for travel	Geologist, movie cameraman, tourist conductor.
59. Legible handwriting	Librarian, clerical worker.
60. Mathematical ability	Engineer, astronomer, actuary.
61. Ability in domestic arts	Home economics, institutional management.
62. Willingness to assume responsibility	Business of own, executive, association secretary.

63. Surroundings preferred:
College laboratories, offices, shops, gardens, hotels, studios, trains, homes, clothing stores, beauty parlors, around railroads, department stores, art galleries, athletic fields, lecture platform, pulpit, newspaper plants, schoolrooms, theaters, forests, court rooms, club rooms, art shops.

64. Locations preferred:
City, village, country. East, West, South, North.

65. Leadership record:
List the positions of leadership that you have held in school, business, church, work, athletics, or fraternities. Include all such as secretary, president, captain, manager, chairman, etc.

66. Kinds of people liked best:
Draw a circle around those whom you dislike and underline those whom you like. Draw two lines under the ones you like especially well.
Boys, girls, Jews, Gentiles, actors, clerks, laborers, farmers, athletes, the poor, the rich, criminals, babies, old persons, men in general, women in general, negroes, foreigners, the middle class, executives, mechanics, city people, well educated people, talkative people, successful people, very religious people, famous persons.

OUTLINE FOR VOCATIONAL SELF-ANALYSIS (*Continued*)

Traits	*Examples of Occupations That Utilize the Trait*
67. Organizations joined: List the organizations to which you belong or have belonged. Include such as orchestra, card club, English club, Y. M. C. A., Boy Scouts, Society of Industrial Engineers, etc.	
68. Most experience in	
69. Spare-time activities	
70. Past failures in	
71. Past successes in	
72. Physical condition	
73. Financial resources for training	
74. Financial resources for business of own	
75. Vocational opportunity with other person	
76. Occupations having an appeal	
77. Occupations advised by parents, etc.....	
78. The "ideal life" if you could choose anything you wished	
79. Your heroes whom you admire most and would like to follow vocationally	
80. Personal history notes of vocational interest	

The above outline of vocational interests and characteristics can be used as a guide for making a self-analysis. When tests and quantitative measures are unavailable to the individual, he might use this as a form of systematic procedure. If possible to do so, the self-analysis should be verified by means of ratings on specific traits, psychological tests, and discussions with competent counselors.

Edward K. Strong, Jr., and his associates have made quantitative studies of vocational likes and dislikes. His

"Interest Analysis Blank" contains 263 items, such as actor, artist, optimists, pessimists, golf, tennis, etc. The individual who is to be tested indicates after each item his attitude toward it; whether he likes, dislikes, or is indifferent toward it. An individual's vocational interest was developed by finding the per cent of men in eighteen occupations who like, are indifferent to, or dislike each of the 263 items. For instance, 38 per cent would like to be actors, 35 per cent are indifferent, and 27 per cent would dislike to be.

Then the per cent of members of any profession, as engineering, who like, are indifferent to, or dislike each of these items was obtained. Thus, 14 per cent of engineers would like to be actors, 37 per cent are indifferent, and 49 per cent would dislike to be.

The differences for each degree of interest between men in general (using the data from the eighteen occupations for this purpose) and engineers were next obtained. In the case of the item "actor," this would be −24 per cent, +2 per cent, and +22 per cent. Then these differences were expressed by smaller figures (that is, −6, 0, and 5), according to a statistical system outlined in the September, 1926, issue of the *Journal of Personnel Research*. These figures constitute the scoring system for measuring the extent to which anyone has the likes and dislikes characteristic of engineers.

If a man records that he would like to be an actor, he receives a score of −6 toward being an engineer; if he records that he would dislike to be an actor he receives a score of +5 toward being an engineer. The summary of 263 such scores gives his final score as compared with average engineering interests.

From the records of 84 engineers, it is known that such men have total scores ranging between 50 and 410. We assume that an individual being tested has the likes and dislikes characteristic of engineers if his total, worked out on the engineering scale, is above 50; and we assume that he does not have the likes and dislikes characteristic of engineers if his total falls below 50.

For a variety of reasons it seems best at the present stage in the development of this vocational guidance test to content ourselves with but three ratings. A man is rated "C" if his score falls below that obtained by any engineer. He is rated "A," on the other hand, if his score is within the range obtained by the 75 per cent of engineers who score highest on the test

(above 180). He is rated "B" if his score falls between 50 and 180. A rating of "A" means that the individual does have the interests of engineers, a rating of "C" means that he does not have, and rating of "B" is intermediate.

Our results show that many men score "B" in one or more professions to which they do not belong. Consequently a rating of "B" in this test does not mean that one should enter the profession in question; but, on the other hand, it is true that many men who rate only "B" are successful in that occupation.

General observation of all our data shows that, if a man rates "A," he has enough of whatever it is that is tested by the interest blank to make good in the given profession. His degree of success will depend upon other factors than those measured here.

TABLE XXVIII

EXTENT TO WHICH MEN IN TWELVE OCCUPATIONS ARE RATED FOR ENGINEERING INTEREST

Per Cent Rated	*A*	*B*	*C*
Engineers	75	25	0
Doctors	9	42	49
Personnel managers	6	33	61
Teachers	8	29	63
Artists	4	29	67
Bankers	2	31	67
Office workers	7	25	70
Lawyers	5	25	70
Certified public accountants	2	25	73
Life insurance salesmen	0	29	71
Authors	4	18	78
Ministers	0	10	90

The technique presented by Strong [6] is a very valuable contribution to the whole problem of vocational guidance. Its one present lack is the fact that standards or norms have been prepared for only a few occupations. Inasmuch as the last United States Census listed 3,000 occupations, we shall have to content ourselves with other methods until such time as our several thousand occupations can be analyzed.

Psychological tests for vocational guidance.—Many people who seek vocational guidance think that the psychologist can test the capacities of anyone and then the person tested will know just exactly what vocation he can and should follow. The psychologists also at one time thought that they might be able to develop predictive testing to that stage, but the recent researches indicate that we were too optimistic. Professor Seashore and his assistants of the University of Iowa have spent thirty years in the analysis of musical talent. They have developed some tests with high predictive values, but the analysis of that one talent is not complete. If thirty years of research in one field have not produced wholly satisfactory results, we should not expect too much from the use of the other tests which have had far less attention than the musical aptitude tests. The Eastman School of Music now uses musical aptitude tests and finds them very helpful, but psychologists have probably made more progress in musical testing than in any other trait or capacity. As stated in the previous discussion of tests, they do have some value, but they are a statistical prediction on the basis of what a group or number of individuals will do rather than what any single person can or will do. In vocational guidance, we want to know not only what a group can do, but we wish particularly to know what a specific individual can do.

Another difficulty in the use of tests only for vocational guidance is the fact that a person may test high in a given trait that could be capitalized vocationally, but the person so tested may not care for that vocation. Thousands of persons are capable of becoming good undertakers, but most of them would object to entering undertaking because of emotional inhibitions. Similarly, psychologists might make more statistical studies of the kinds of men and women that can marry each other with the greatest chances of a happy marriage, but such tests would have little value in decreasing matrimonial failures. The persons whom scientific analyses would indicate as ideal mates might not care for each other at all and would refuse to go through with the ceremony. Scientific marriages would not be nearly so

[6] Strong, Edward K., Jr.: "Vocational Guidance of Engineers," *Industrial Psychology*, June, 1927, p. 291 ff.

inviting to the masses of people as the old-fashioned method of romance and chance. Two individuals must be "drawn" to each other emotionally. The individual must also be attracted to his vocation emotionally.

This statement of some of the limitations of tests should not be construed as making them valueless. It is important to use tests as one factor to be considered when dealing with

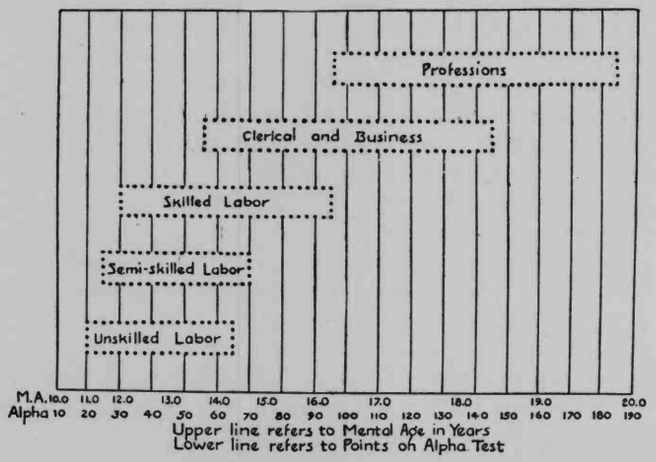


Fig. 26—The range of intelligence scores of the middle 50 per cent of various occupational groups, on the basis of the army examinations of 36,500 recruits.—Adapted from *Memoirs of the National Academy of Science*, Vol. 15, 1921, p. 829, and Hollingworth, H. L.: "Mental Growth and Decline," D. Appleton and Co., 1927, p. 255.

vocational problems. Tests are particularly useful in pointing out certain vocations in which the individual would have small chance of success. Certainly, any one who considers choosing music as a career should first have himself tested by some one who can administer the Seashore test or adaptations of that test. Other specific ability tests that should be considered in some cases are:

Mechanical aptitude.[7]

[7] Stenquist, J. L.: "Measurements in Mechanical Ability," C. H. Stoelting Co., Chicago, Ill.

Engineering aptitude.[8]
Social intelligence.[9]
Business ability.[10]
Trade tests.[11]
Motor car driver.[12]

When the vocational counselor attempts to find tests that are of unquestionable value in the vocational guidance of youth, he has difficulty in finding any that are conclusive. He must resort to the use of general intelligence tests. General intelligence has been defined in various ways, but chiefly as the ability to adjust one's self to the problems of one's environment, the average of various abilities, the ability to learn, and the ability to do school work. The last definition appears to be the nearest to truth. Most studies indicate a definite relationship between general intelligence or mental ability and other desirable traits of vocational significance. Intelligence and characteristics of positive value tend to go together as indicated by the following table[13]:

TABLE XXIX

CORRELATIONS OF INTELLIGENCE QUOTIENTS AND VARIOUS TRAITS IN A GROUP OF 150 GRADE CHILDREN
(After Dickson, quoted from Terman.)

Trait	*Correlation with I.Q.*
Sense of humor	.58
Persistence	.53
Initiative	.53
Will power	.50
Conscientiousness	.48
Personal appearance	.44
Cheerfulness	.43
Physical self-control	.42
Courage	.39
Dependability	.38
Emotional self-control	.29
Unselfishness	.29
Speed	.28

[8] Thurstone, L. L.: "Thurstone Vocational Guidance Tests," World Book Co., Yonkers, N. Y.
[9] Moss, F. A.: "Center for Psychological Service," Washington, D. C.
[10] Hepner, Harry W.: See Appendix of this book.
[11] Chapman, J. C.: "Trade Tests," Henry Holt & Co., New York City.
[12] Snow, A. J.: "Psychology in Business Relations," A. W. Shaw & Co., Chicago, Ill.
[13] Gates, Arthur I.: "Elementary Psychology," The Macmillan Company, 1925, New York, p. 579.

These correlations are not high, but the vocational counselor is justified in the use of general intelligence tests, because such tests do give a rough or general prediction. Certainly, in cases of extremely high or low intelligence, we are safe in making definite predictions. A person with an intelligence quotient of less than 100 could not do college work. Lack of intelligence can be compensated for, to some extent, by an exceptionally great amount of effort, but even superior effort would not enable a student of low intelligence to succeed in college. The high school student who plans to enter college should try to select a college and a course that are in harmony with his intelligence level and high school marks (see Tables XXX and XXXI).[14]

TABLE XXX

MEDIAN ALPHA SCORES OF VARIOUS DEPARTMENTS IN OHIO STATE UNIVERSITY (5,950 students.)

Department	*Score*
Liberal arts	147
Medicine	142
Law	142
Engineering	141
Agriculture	133
Pharmacy	125
Dental college	115
Veterinary college	112

TABLE XXXI

MEDIAN SCORES IN THE "PSYCHOLOGICAL EXAMINATION" OF THE FRESHMEN OF VARIOUS SCHOOLS AND COLLEGES OF AN EASTERN UNIVERSITY

College or School	*Median Score*
School of Education	175.5
College of Engineering	171.8
College of Arts and Sciences	167.9
University Median	162.8
College of Fine Arts	160.0
School of Commerce	159.3
School of Forestry	155.2
School of Oratory	154.0
Library School	151.0
College of Agriculture	129.0
College of Home Economics	114.7

[14] *Ibid.* p. 474.

In the studies of the variation of the intelligence of students of various colleges, it was found that much overlapping existed. However, it is probable that the border-line students, those near the minimum of intelligence, can do acceptable college work more easily when they select a college or a course that does not require the highest degrees of abstract intelligence.

The psychoanalytical method of choosing a vocation.—Some of the leading psychoanalysts believe that vocational counselors are simply meddlers and that the individual should be allowed to follow the directions of the "Unconscious." They believe that all actions are determined by unconscious motives that follow definite paths formed in the individual since childhood. A person's work or profession is a sublimating process in the service of hunger and love.[15]

The writer has attempted to assist several hundred persons in choosing a vocation. Some of these were students who were asked to have a vocational conference, but others, who heard of these conferences, requested guidance. Those who requested assistance in choosing a vocation certainly included an unusually high percentage of psychoneurotic and slightly psychopathological cases. Unfortunately it is not possible to present adequate statistics to prove that many adults who seek vocational guidance do so because of definite emotional maladjustments. An estimate, based upon experience in this field, suggests that at least one-third of the adults who voluntarily seek vocational guidance are really seeking an adjustment to life in general rather than a vocation only. This estimate is probably too low. In one investigation of 4,375 cases of discharge from industrial establishments, it was found that the chief causes of failure were not lack of skill or technical knowledge, since more than 62 per cent of the cases were dis-

[15] Brill, A. A.: "Fundamental Conceptions of Psychoanalysis," Chapter XIII. Harcourt, Brace & Co., 1921.

charges through failure in human relations and character qualities.[16]

Psychoanalysis is of assistance to the student of vocational adjustment because it indicates the manner in which the person with a feeling of inferiority attempts to compensate for his sense of inadequacy. It is probably true that Napoleon became the conqueror of a large part

Fig. 27—"Bonaparte, a Novice in the School at Brienne," by Realier-Dumas. *By permission of Gramstorff Bros., Inc., Malden, Mass.* This painting is reproduced to illustrate the influence of subconscious drives in choosing a career. Napoleon may have become a conqueror as a compensation for a number of unhappy childhood experiences. An inferiority complex is often compensated for by a career that satisfies the ego's needs.

of the civilized world because of the taunts of his playmates in his childhood. Some of our poets achieved their eminence because of physical defects. In fact, Adler cites many cases of compensation brought about by some organic inferiority and concludes that some psychic reaction makes

[16] Brewer, John M.: "The Recent Progress and Problems of Vocational Guidance," *School and Society*, Jan. 16, 1926.

up for the deficiency of the physical organism.[17] This theory is hardly sound, because we develop our feelings of inferiority as the result of comparing ourselves with others. A person who has average artistic ability when compared with the other artists of the world may have a definite sense of inferiority, because he knows there are others who

Fig. 28—"Young Raleigh," by John Everett Millais. *By permission of Gramstorff Bros., Inc., Malden, Mass.* This famous painting is reproduced to illustrate the fact that some individuals choose their vocation as the result of instructional influences. Not all careers are the result of subconscious drives—the following of directions of the "Unconscious."

are considerably better than he. A person need not have any actual physical or mental inferiority in order to feel inferior. The odious comparisons of life give us the impressions of inferiority. The business world is filled with able business men who attempt various methods of com-

[17] Adler, Alfred: "A Study of Organ Inferiority and Its Psychical Compensation," *Nervous and Mental Disease Monograph*, 1917.

pensation because they realize that others are better business men or have higher salaries than they have. An executive who has a salary of $10,000 per year may feel decidedly inferior to men who make $25,000 per year. He may attempt to compensate for his supposed deficiency by demanding that others bow and scrape in his presence, by becoming an expert golfer, by collecting antique furniture, by anger when any one misspells his name, or by any one of hundreds of ways. The executive who overcompensates may attempt to increase his ability and business position so that he will have an income of $30,000 per year. Of course, as soon as he does that he is apt to find that a few others make $50,000 annually and then he may be just as unhappy as he was in the first place.

The possessor of the inferiority complex loses his perspective. He cannot compare himself with the entire range of ability in any one trait, recognize the futility of achieving perfection, and then say to himself: "I have less ability than 15 per cent of the men in a certain field that is important to me and greater ability than the other 85 per cent. Now, I might spend most of my life trying to raise myself to the top level, but life is short and many other things in this fine old world are also interesting. I shall be satisfied, now that I have reached the eighty-fifth rung on the ladder, and shall stop there, look around, and enjoy myself."

One of the most important things the psychologist has done for the business man who must deal with employees who suffer from a sense of inferiority is teaching him to offer praise rather than criticism. The man who retires to the farthest corner of the office and says nothing can be made more sociable by praising him for his good qualities. To ignore him is to make him more self-conscious and backward. If a child fails to receive enough recognition in school for his scholarship, he may tend to be a "roughneck" in the school yard or he may collect stamps. Should he find that neither rowdiness nor stamp-collecting gives him the

desired emulation and self-satisfaction, he may attempt some other form of compensation, or even become a confirmed psychoneurotic. Likewise, the employee who does not attain his ego-maximation in his work will resort to billiards, writing articles for trade journals, criticizing fellow employees, or other forms of self-expression. One college professor of public speaking, who has had a great deal of training in psychology of the abnormal, estimates that 90 per cent of the students who major in oratory do so as a form of compensation.

The person who seeks a vocation that fits his personality should ask himself: What embarrassing or unpleasant experiences have I had for which I need compensation in my work? If he cannot answer the question himself, he might consult the psychoanalyst. Each year it is found that several college students who are barely able to do college work and just manage to graduate wish to take additional postgraduate work in another college which has a reputation for requiring unusually hard work. This desired prestige of having done graduate work in a famous institution is merely an attempt to compensate for the feeling of inferiority engendered by their inability to do college work of ordinary grade. In most cases, it has been difficult to convince these poor students that they wish to do graduate work, not because it is essential to their careers, but because the contrast between themselves and other college students causes them to think that they are inferior. Actually, they are fine young men who have developed an abnormal attitude toward the importance of college degrees and the college aura.

Parents who attempt to influence the choice of vocation for their children often do so as a compensation for their own deficiencies. The parent may say, "It is for the child's good." Actually, it may be a form of display for the parent. When parents find that they can no longer hope to become famous or to achieve their adolescent dreams, they project their hopes for glory in the brightest or favorite

child of the family and compel the child to enter the profession which, in their opinion, has the most prestige or wealth. When a boy fails in college and the personnel adviser suggests to the parent that his son should become a mechanic or a business man rather than a surgeon, the parent is likely to answer disgustedly: "Why, that's no profession at all. I want my son to amount to something." Such an answer indicates that the parent is the one who really wants to amount to something. Fortunately, most parents allow their children to choose their own vocations and give information only when it is requested.

TABLE XXXII*

INTELLIGENCE AND OCCUPATION

Vocational category	*Intelligence level in terms of mental ratio or I. Q.*	*Educational category*	*Male adults engaged, per cent of total*	*Per cent of school children thus rating*
Highest professional and administrative work...	Over 150	Scholarships and university honors	0.1	0.2
Lower professional and technical work	130–150	Scholarships (secondary)	3.0	2.0
Clerical and highly skilled work	115–130	Central or higher elementary	12.0	10.0
Skilled work. Minor commercial positions	100–115	Ordinary elementary.	26.0	38.0
Semiskilled work. Poorest commercial positions..	85–100	Ordinary elementary.	33.0	38.0
Unskilled labor and coarse manual work	70– 85	Dull and backward classes	19.0	10.0
Casual labor	50– 70	Special schools for the mentally defective..	7.0	1.5
Institutional cases (imbeciles and idiots)	Under 50	Occupation centers for the ineducable	0.2	0.2

The case method of vocational guidance.—The evidence presented in the preceding discussions suggests that, while some individuals do not need vocational guidance, many

* Hollingworth, H. L.: "Mental Growth and Decline," D. Appleton & Co., 1927, p. 253 ff. Adapted from "A Study in Vocational Guidance," Industrial Fatigue Research Board, Report No. 33, 1926, p. 13. "The results of the above table are adapted from data given by British investigators, based on the study of census returns for the city of London, and on the examination of school children by means of intelligence scales. These figures are given as only 'the roughest approximations' and as a 'tentative table' " but the results are confirmed by American data.

others do. We must not assume that all wholly normal persons need no assistance in choosing a vocation. The normal youth is not raw material psychologically, but was raw material at birth, and, since birth, he has been conditioned in thousands of ways. He has certain likes and dislikes, some feelings of inferiority, self-confidence in certain situations and not in others, a rather fixed grade of intelligence, and accumulated experiences of all degrees of importance, so that his psychological composite may not gravitate to a happy vocational choice. In many cases he finds that he has difficulty in choosing a vocation. Even though he thinks that he knows what he wants to do, it may be well for him to attempt to obtain a bird's-eye view of himself and the world in which he lives. He really knows only a few occupations, and those he does not know comprehensively. Such a case study involves the following steps:

I. Analyze the individual.
   A. History and general status.
      1. Health record.
      2. School record.
      3. Financial status.
      4. Leadership record.
      5. Hobbies and recreational activities.
      6. Psychological test scores.
   B. Vocational likes and dislikes—self-analysis.
   C. Estimates of associates and friends—ratings by others.
   D. Peculiarities of personality.
   E. Parental wishes.

II. Present the suggestions of the above to the advisee in a personal conference.

III. As a result of II, choose several occupations for the investigation of the advisee.

IV. After investigation of the several tentative occupations, choose one as a vocation.

V. Plan a program of training.

VI. Assist advisee to obtain a job or get started in the chosen field.

VII. Follow up advisee and revise his program as occasion demands.

Vocational guidance by use of the case method has the advantages and the defects of the physician's services. Its value is difficult to prove or to disprove. If the patient takes the doctor's prescriptions and gets well it is often impossible to know whether the patient regained health because of the medicine or in spite of it. Similarly, investigations of the value of vocational guidance are not conclusive. No one knows what the advisee would have done if he had not followed the adviser's counsel. The writer made an intensive study of 58 individuals who sought vocational guidance. Two years later, each advisee was investigated regarding the number of suggestions that he had accepted and applied. The following table [18] presents the results of their replies:

Kinds of Suggestions Given	Percentage of Suggestions Accepted by *Students, under* 20	*Adults, over* 20
For improvement of personality	58	48
Educational suggestions	86	57
Vocational suggestions	61	39

The above table indicates what experience tells us: counseling should be along the lines of educational guidance and should begin with students under twenty years of age.

Occupational analyses.—The following appeal, with its list of factors to be considered in making an occupational study, may be used with a youth who should study several occupations before choosing one as a vocation:

How to Analyze an Occupation

Before you choose any occupation upon which to build your career you should know what you will find in the occupation. Very few persons know the various advantages, disadvantages, requirements, remuneration, and possibilities of the occupations they drift into or choose. They usually take the job nearest at hand and trust to luck or their ability. They are like the fellow

[18] Hepner, Harry Walker: "Principles and Procedure in Vocational Guidance," *Industrial Education Magazine*, October, 1926.

who pays a dollar for a grab in the bag without knowing what the bag contains. Whatever occupation you choose you should know what it means to follow that occupation. In this case knowledge gives power.

The principal phases of any occupation which you should know before choosing it for a career are suggested in the following seventeen points:

1. What are the main divisions of the occupation?
2. What tasks does a person in the vocation usually perform?
3. What are the working conditions?
4. What human and other contacts does the work offer?
5. What responsibilities are involved?
6. What is the demand and supply of workers in the field?
7. What income can be expected?
8. What personal qualities are required for the work?
9. What preparation is necessary?
10. What capital is required?
11. What continuous training is required?
12. What are the opportunities for service to society and our fellow men?
13. To what related work can it lead?
14. What are the advantages and congenial features?
15. What are the disadvantages and uncongenial features?
16. Why have some failed in this work?
17. What final steps should one take before deciding on the occupation as a career?

The vocational program.—The following conversation and appeal to a youth illustrates one kind of appeal that can be made when the counselor wishes the advisee to plan a definite program for training himself in his chosen vocation.

The typical vocational drifter can be described in the following case: Mr. A. is thirty-four years of age, single, of excellent character, very pleasing personality, fairly good education, in good health, a very hard worker, and above average in ability. Notwithstanding these fine qualities he is making only $140 per month. Why is his salary so low when his native ability is high and every day finds him hard at work?

For the same reason that many men and women fail in life. He just worked hard and hoped that some day things would come his way, but he never planned how and when those things

should come. He never chose an objective. He did not know where he was going or how to get there.

Vocational success hinges partly upon not trusting your life to chance, but knowing what you want and how to get it. The man of little ability who concentrates his efforts on one thing, in one direction, and on one goal is bound to succeed. He attains far greater height than the man of brilliant ability who lacks a goal.

After you have chosen a vocation or selected your vocational goal, you should do what successful business concerns do—schedule your plans. Decide upon what you want to accomplish each year for the next few years. Determine upon what you will do each year in order to attain your goal. Set up standards for yourself. Set a date when you will accomplish each step and keep that schedule before you. Look at it occasionally, especially when you are failing.

Whenever you find that your schedule needs revision, revise it. But follow a definite plan or you will drift, and drifting wood never reaches port. On the next page are shown two sample vocational programs which will illustrate how one can plan a career.

Specialization in the vocational program.—When the vocational program is to be planned for the business man, should he attempt to specialize in a field to the narrowest possible degree, partially specialize, or generalize? Is modern business so completely functionalized that the office workers and executives should know but one task and know that well? The answer is suggested for the field of advertising in a study made by the University of Detroit in cooperation with the International Advertising Association's Bureau of Research and Education. This survey was confined to the city of Detroit, but was based upon the actual experience of 500 creative advertising men. It was found that the advertising manager had 10.5 distinct functions, the account executive 9.9, and the agency head 9.3. The production managers averaged 3.0 and the artists 3.3 tasks.

When the salaries were studied in relation to the number of tasks, it was found that the men who performed or took part in from 13 to 15 tasks received the highest salaries and those who had only from 1 to 3 tasks received the

SAMPLE VOCATIONAL PROGRAMS

Schedule of young man who wants to have a business of his own, a photographic studio. Likes photography and other artistic work. 2 years high school education. Age 18. Unmarried.

Age Program for each Year

Present age 18

19—Get a job with a good photographer. Take a small salary. Study.
20—Learn more about photography with employer. Save money for year at school.
21—Study photography at a good school. No salary this year.
22—Travel and work for several good photographers. Get a varied experience.
23—Study and practice. Work for a very good photographer. Save money for capital.
24—More study and practice with good artists. Save money for capital.
25—Increase acquaintances and salary. Do some very good work. Write for the trade magazines.
26—Develop reputation and prepare for own business. More experimenting and writing.
27—Go into business for self in city. Secure high class trade only. Advertise.
28—Improve business and reputation. Profits of $4,000 to $7,000 per year.

Schedule of high school senior who wants to become a lawyer. Now 17 years of age. Unmarried. Small amount of capital for college training.

Age Program for each Year

Present age 17

18—Select a college where two years of work will prepare for entrance to law school. Select a college in a large city in order to be able to earn money in part-time work. Enter college and study hard in freshman year.
19—Complete second year at college. Have high grades in studies. Secure funds for law college work. Learn to operate a typewriter.
20—Enter law college. Keep on lookout for the special phase of law having the greatest interest for a permanent specialty.
21—Complete second year at law college. Develop friendships and personality. Study politics.
22—Complete third year at law college. Look around for a place in some good lawyer's office. Graduate with honors.
23—Enter office of good lawyer who specializes in the right field, "catch on" to the best methods of work and the winning of cases. Salary of $10 per week.
24—More experience with law firm of same type. Look around for a permanent location. Get the minor cases to handle. Develop friendships by joining clubs.
25—Open office of own. Handle each case well. Increase range of activities. More friendships. Speak before various organizations on subjects of community interest. Possibility of matrimony.

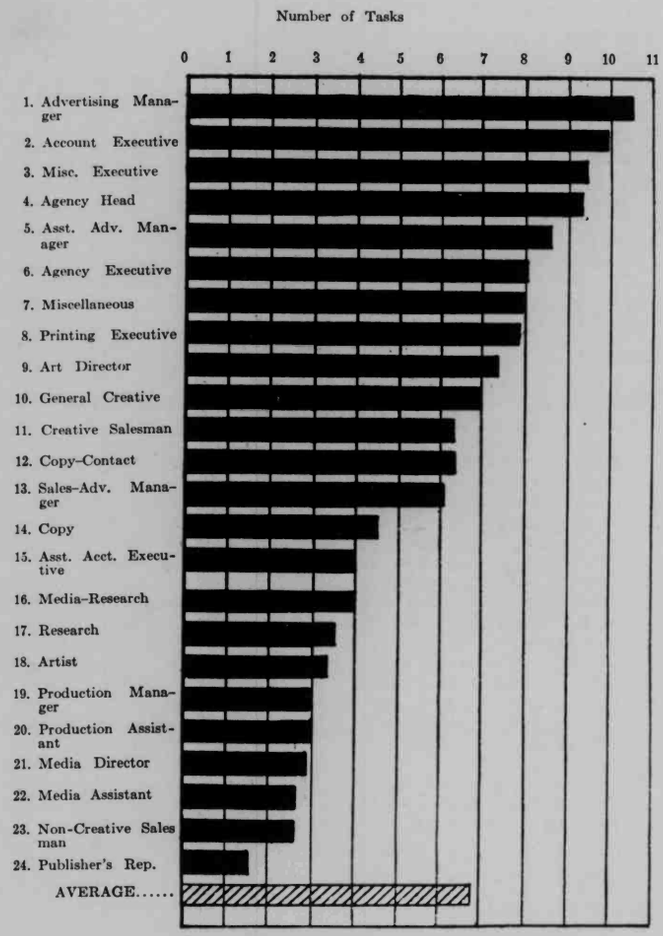


Fig. 29—Showing average number of tasks regularly performed by each type of position—500 advertising men, Detroit, 1928. Reported by Lyndon O. Brown.

lowest salaries. Up to a certain point, each added function brought an addition to the income of approximately $275 per year. The men with the greatest amount of generalization, with from 19 to 21 tasks, received an average income of slightly more than $8,000 and the men who followed a middle course of from 13 to 15 tasks received $9,100. The most specialized group had an average income of slightly less than $5,800.[19] This investigation agrees with the consensus of opinion of business executives who claim that the higher priced business men must know and take part in a varied number of activities rather than specialize narrowly.

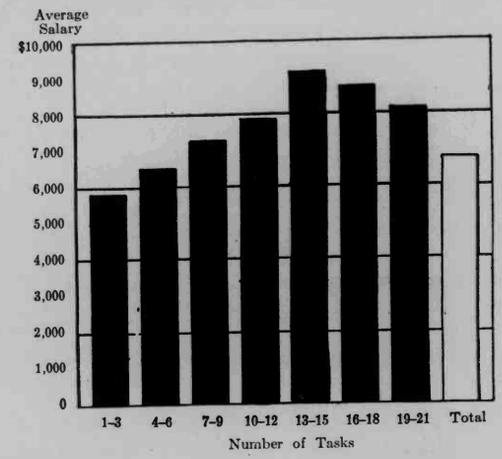


Fig. 30—Showing average salary received in relation to number of tasks performed—creative advertising men reporting, Detroit, 1928. Reported by Lyndon O. Brown.

College education as a part of a vocational program.—When a high school graduate wishes to enter business and plans his vocational program, he must decide whether he will go to college or enter business without college training. Many statistics of the following type are published and are

[19] Brown, Lyndon O.: "Specializing in Advertising, Unprofitable. Detroit Survey Indicates," *Class and Industrial Marketing*, March, 1929, p. 66 ff.

read by young men, so, naturally, they believe that collegiate training is essential:

A study made by Boston University shows that the college man earns between the ages of 22 and 60 an average of $150,000; this is $72,000 more than the high school graduate, who, in turn, earns $33,000 more than the grammar school graduate.

The 1915 Princeton class received an initial average salary of $805; in ten years the gross average income was $10,492. A more general survey shows that Princeton men have an average of 1 1-3 cars, valued at $2,237.48, and average assets of over $68,000; the average salary is $5,221.19, but this is augmented by income other than salary of $4,000 a year per person. Seventy-nine per cent carry life insurance of more than $20,000 apiece.

University of Pennsylvania statistics show that graduates begin with an average income of $950, but in the fifth year it becomes $6,380.

Columbia engineering graduates start on the average at $1,500, in ten years are getting $4,000; in twenty, $6,000; in thirty, $7,500, with 10 per cent of them making $30,000 a year after thirty years.

College graduates have furnished 55 per cent of our Presidents, 69 per cent of our Supreme Court Justices, 65 per cent of our Attorneys-General, and 62 per cent of the Secretaries of State. The college trained man is said to have 800 times the opportunity of achievement enjoyed by the elementary school graduate.[20]

Such statistics do not present a complete picture of the value or nonvalue of a college education. When investigations are made where successful men of any one field are compared with the unsuccessful, it is found that many of the successful individuals in business do not have a college education. Certainly, we cannot say that a college education is essential to business success. The main reason why college graduates make more money than high school or common school graduates is because of the differences in general intelligence and personality. A youth with high intelligence and strong character traits can become a captain of industry without a college degree. Furthermore, statistics of the value of college training based upon men who graduated twenty years ago are not to be compared with modern conditions. Going to college then required more initiative and ability than it does to-day, when a college student is not a community marvel as he was then. College is the required or accepted education for certain occupations at present and many business men prefer college graduates, according to a questionnaire sent to the personnel men of 150 corporations of all types of business:

1. Do you prefer college graduates? *Yes,* 55 per cent; *qualified,* 45 per cent.
2. For what sort of work? The replies may be classified in general as in the answers to the fourth question: *technical,* 69 per cent; *nontechnical, including salesmen,* 31 per cent.
3. What type of college graduate, if any, do you rate highest as an employee? Technical leads in the answers, with graduates of business administration schools specified in 10 per cent.
4. Which type of college education is more productive of results in its human material? (a) *Technical;* 69 per cent; (b) *Nontechnical:* 31 per cent.
5. What percentage rise to executive rank? 42.8 per cent (of those who remain).
6. What, in your opinion, are the particular qualifications which the college graduate brings to industry?

ADAPTABILITY: *Yes,* 71 per cent; *no,* 22 per cent; *qualified,* 7 per cent.

ADDRESS: *Yes,* 69 per cent; *no,* 8 per cent; *qualified,* 23 per cent.

SCIENTIFIC APPROACH: *Yes,* 62½ per cent; *not answered,* 25 per cent; *qualified,* 12½ per cent.

FACILITY IN SOLVING PROBLEMS: *Yes,* 59 per cent; *no* 8 per cent; *qualified,* 33 per cent.

INITIATIVE: *Yes,* 54 per cent; *no,* 23 per cent; *qualified,* 23 per cent.

ECONOMIC VISION: *Yes,* 40 per cent; *not answered,* 31 per cent; *qualified,* 29 per cent.[21]

[20] Reported in "What Kind of College Man Business Wants," *Industrial Digest,* May, 1927, p. 23. These figures are taken from an address in the Business Men's Hour, WRNY, Hotel Roosevelt, New York, by Dr. Jeremiah W. Jenks, President of the Alexander Hamilton Institute and Research Professor of Government, New York University.

[21] Reported in "What Kind of College Man Business Wants," *Industrial Digest,* May, 1927, pp. 22, 23.

We can feel safe in saying that the percentage of college men who succeed in business is higher than the percentage of the group who do not go to college. There is also some evidence to indicate that high scholastic standing in college is correlated with future success in business. "E. K. Hall, who for two years made a study of the relation between high scholarship in college to success in the Bell Telephone system, found that the man who during his course at a college stood among the first ten of his class, has one chance in two of standing in the first grade in salary. On the other hand, he shows that the man in the lowest third in scholarship in his class has, instead of one chance in two, only one chance in five of standing in the highest grade in salary, and that there is nearly one chance in two that he will stand in the lowest grade." [22]

TABLE XXXIII

AVERAGE INCOMES FOR FIVE YEARS—UNIVERSITY OF PENNSYLVANIA GRADUATES OF 1917

Occupation	*First Year* 1918	*Second Year* 1919	*Third Year* 1920	*Fourth Year* 1921	*Fifth Year* 1922
Salesmen	$1,623	$1,566	$1,900	$2,666	$5,100
Printers and publishers	840	1,360	2,450	4,150	5,050
Sales managers	2,550	3,000	3,250	2,850	3,300
Auditors	1,395	1,750	2,663	3,886	4,790
Accountants	1,429	1,956	2,446	2,999	3,809
Real estate dealers	1,779	2,313	3,984	1,847	2,769
Chemists	1,450	2,450	2,900	3,075	3,075
Manufacturers	2,183	2,400	2,813	3,142	5,133
Lawyers	540	511	984	1,733	2,678
Engineers	1,543	1,948	2,434	2,765	2,928
Bankers	950	1,675	2,575	3,075	3,425
Insurance agents	2,200	2,640	3,120	3,546	5,003
Retailers	1,125	1,421	3,313	3,650	3,550
Teachers	1,213	1,553	1,528	2,211	2,264
Owners of business	952	1,456	2,284	3,520	6,380
Averages—All occupations	$1,451	$1,867	$2,704	$3,008	$3,950

Average for all occupations for five-year period, $2,596.[23]

[22] "Leaders or Just Scholars?" *Printers' Ink Weekly*, Aug. 23, 1928, p. 65.
[23] *"Personal Efficiency,"* Lefax, Philadelphia, July, 1923, p. 50.

The student who attains high grades in college and then succeeds in business probably does so, not because the college trained him to think or gave him technical training, but because of superior intellectual and character traits. Certainly, we should not advise every high school student to go to college. If a student barely manages to get through high school and if his general intelligence in abstract subjects is low, it may be inadvisable to recommend college training. It is interesting to know that high school graduates of both low and high mental ability plan to attend college. The desire to attend college is not a reliable criterion of the ability to do college work. Thousands of college freshmen are dropped each year because of the fact that they are unable to do the work. However, if a youth has the intelligence and personality that will enable him to benefit from a college education, then he should by all means go to college, even though he may have to earn all his own funds for doing so.

A survey of 160 engineering schools has shown that 60 per cent of those entering as freshmen do not graduate and only 13 per cent are credited with an adequate idea of what their chosen work means.

In many cases, it is best for the counselor to tell the person whose ability is doubtful that he should try college, but not to be disappointed if he finds that he does not enjoy college work. Some men manage to remain in college, disliking to quit because of the supposed social stigma attached to dropping out. This view on the part of the public is wrong, and the public must gradually realize that some men should go to college whereas others should not go. To have to drop out of college may result in the individual's later making a pronounced success in another field, where a high degree of abstract general intelligence is not required, but where general intelligence can express itself in some other form, such as mechanical, social, business, artistic, or musical ability.

Projects.

1. "Success in a vocation depends upon an adjustment to life in general rather than the fortunate selection of an occupation." Assume that this statement is true and prepare a list of mental habits that every person should acquire to be vocationally successful. Assume that the above statement is incomplete and add other forms of behavior that are essential.

2. "A rolling stone gathers no moss" and "A setting hen never gets fat." Which of these two epigrams is the more nearly correct? When should a man change his position?

3. Outline a program for obtaining valid occupational information that fits your needs.

4. Analyze yourself vocationally by means of the devices and suggestions presented in this chapter. Present the analysis in the form of a systematic report to your friends and ask them to criticize it. Then prepare a vocational program to fit your significant traits.

5. What psychological tests have you taken that suggest the kind of occupation you might choose for a career?

6. Try to analyze your behavior as the psychoanalyst would analyze it. What experiences have modified your behavior? To what extent do you consider your past behavior the result of subconscious influences?

7. Outline a program for obtaining a position. Include an unsolicited letter of application, trade journal advertisement, list of firms where you might apply, and a written description of the facts about yourself that you would try to present to the prospective employers.

8. Prepare a graphic presentation of your past history. Use an outline map to show the places where you have worked in the past.

9. Compare the advantages and the disadvantages of going into business for yourself with those of working for an employer.

Part III

INFLUENCING THE BEHAVIOR OF THE INDIVIDUAL

CHAPTER XII

Personal Efficiency

How the Business Man Can Regulate His Own Behavior to Obtain Advancement

The urge for activity.—A dynamic missionary was recently sent to a certain Indian reservation where he attempted to modernize the members of the tribe. He usually found a certain robust and intelligent brave sitting before his wigwam where he had spent many moons in peaceful daydreaming. The missionary decided that the Indian could improve himself by getting a job in a near-by city and the following conversation took place:

Missionary. Brother, why don't you go to the big city and get a job in a factory?
Indian. Suppose I get a job, what then?
M. If you get a job, you will get money and you can have many things.
I. What then?
M. Well, if you do your work well, you will be promoted, become a foreman, and have more money.
I. What then?
M. Oh, then you may become the superintendent of the factory if you work hard enough.
I. What then?
M. If you study all about the business and work harder, you may become the manager of the whole business.
I. Suppose I become the manager, how would that benefit me?
M. If you are an able manager, you can start a business of your own and have more money than ever.
I. Then what?
M. Oh, eventually, you will have so much money that you won't need to work at all.
I. That, paleface, is what I'm doing now. Why go to so much trouble to gain that which I already have? The

white man has the restless sea within his bosom, but the Indian dreams with the stars and looks on.

The achieving man has an urge, a drive, a "restless sea within" which demands constant activity. These drives are not placed within the individual by his own volition, but are the result of his heredity, his physical condition, and his past experiences. Hereditary impulses cannot be initiated within one's self. The physical condition can be improved and is usually an unconscious factor in attaining eminence or success. Also, studies of great men indicate that some become great because of the subconscious urge to compensate for a physical defect, such as lameness or deafness. Of course, few persons would voluntarily acquire a physical handicap as a stimulus toward achievement. Other experiences that act as a drive somewhat similar to that of the physical defect are the sublimation of sex energies, the determination to revenge an insult, and the attempt to adjust one's life to the nagging of a tormenting wife. However important the subconscious drives to activity may be,

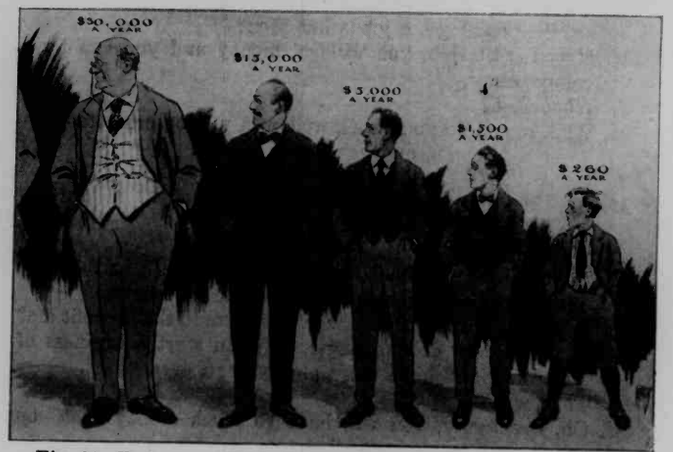


Fig. 31—Each one—"If I had that fellow's salary, I would be satisfied." —By Edwin Marcus. Reprinted by special permission from *The Saturday Evening Post*, copyright, 1923, by the Curtis Publishing Company.

the individual must limit his volitional means of motivation to the more common methods of rivalry with others or himself. Business men have learned how to stimulate employees by organizing contests among them or by challenging them to beat their previous records. The most common method of urging on salesmen is the contest. Similarly, the ambitious worker finds it helpful to compete with himself or to set up goals for his attainment.

The urge to achieve is seldom superimposed upon himself by the individual, but circumstances of his environment automatically set the goals for him, as in the case of children who demand the best that can be given them or friends whose greater wealth or position challenges him to outdo them. When the individual finds himself in a situation where he compares his status with that of others, he is likely to seek some magical or quick means of attaining his ends. He may read the biographies of great men, study success books, or books on "how to have power of will." Such epigrammatic books, articles, and lectures are inspiring; but, if environment has already given him an urge, he can accomplish more by the practice of more prosaic acts, such as memorizing the names of customers, plotting graphic charts, and learning the cold facts of his own job.

The "will."—Many psychologists no longer believe in the old concept of will. Most people think that the will is some mysterious force which one can, as it were, grab out of the universe, draw to himself, and have work within him like yeast in dough. This popular idea of will is questionable; for, actually, a strong will is largely a name for the habit of persistence and success, and a weak will is but a name for the habit of failure.

THE MAKING AND BREAKING OF HABITS

One day through the primeval wood
A calf walked home as good calves should;
But made a trail all bent askew,
A crooked trail as all calves do.
Since then three hundred years have fled,
And I infer the calf is dead.

But still he left behind his trail,
And thereby hangs my moral tale.
The trail was taken up next day
By a lone dog that passed that way;
And then a wise bell-wether sheep
Pursued the trail o'er vale and steep,
And drew the flock behind him, too,
As good bell-wethers always do.
And from that day, o'er hill and glade,
Through those old woods a path was made.

And many men wound in and out,
And dodged and turned and bent about,
And uttered words of righteous wrath
Because 'twas such a crooked path;
But still they followed—do not laugh—
The first migrations of that calf,
And through this winding woodway stalked
Because he wobbled when he walked.

The writer proceeds to tell us that the path became a lane, and that the lane became a road, where many a poor horse toiled on with his load beneath the burning sun and traveled some three miles to make one mile.

And men two centuries and a half
Trod in the footsteps of that calf.

For men are prone to go it blind
Along the calf-paths of the mind,
And work away from sun to sun,
To do what other men have done.[1]

The habit of success or failure is developed in childhood by the attitudes and disciplines of parents, teachers, and playmates. If the child is required to complete the little tasks he starts and is rewarded for the tasks successfully completed, the habit of success will be developed. In later life he will not have the habit of failure, vacillation, or hesitancy.

The habit of success or the arousing of persistence in the face of difficulties can be stated in the following simple rules:

1. If you wish to accomplish anything, outline a definite plan. If it is a simple program of study, outline it mentally. If a long program, covering several months, outline it on paper and schedule the various stages by dates. Use the example of the modern business corporation which schedules the various stages in the construction of a building or production of parts.

[1] Anonymous. From Peters, Charles Clinton: "Human Conduct," pp. 250, 251. The Macmillan Company, 1921.

2. Instead of saying to yourself, "I will do that," say, "I will do it in this particular way." Put your mental efforts upon the *how* of the proposition.

3. Plan to do, not to be. Herein lies the cause of many failures in life and explains what we mean when we say that a man has a wishbone where his backbone ought to be. Don't dream of what you will do once you become a millionaire. Don't think of how you will look, riding in a fancy limousine, or playing golf on your country estate, or how you will build hospitals and orphanages, but think of what to do in order to make a million dollars.

4. Be enthusiastic about your scheme, plan, or objective. Adopt it heartily as your own. Discuss it with wife, sweetheart, or mother. If in doubt about its practicability, discuss it with men who know more about it than you do and get their suggestions and enthusiasm.

5. Measure your progress. Occasionally you should stop and note how much you have accomplished.

6. Don't try to complete the whole program at once but fix your attention upon one phase of the plan. Do it by stages if it requires a long time. Go step by step and the end will take care of itself.

7. Make your motto "Do it now."

If you have often wished that your income might be doubled in the next two years and that you might be mentally powerful, apply these simple but practical rules and note their superior effectiveness as compared with studies of the so-called "power of will."

Improving the memory.—Many people dislike the idea of memorizing, because memory is thought of only as a mechanical process of "learning by heart." Thinking and memorizing are usually considered as alternatives. Actually, they are a part of the same process and go together. Material which has been thought through is remembered

without much effort. Memory is a by-product of study and the general principles of study apply to memorizing.

The main way to improve memory is to improve the methods of learning. However, the following rules may aid in improving the ability to remember:

1. Get the meaning of the material to be remembered. Be sure that you clearly understand the material you want to recall. Think of the new ideas from every angle and try to apply them to practical situations. Do this not only when you are reading but also when you are at leisure. When you are walking or riding to and from your office, do not waste the time in idle reverie. Utilize your spare time. Perhaps you may think it dangerous to keep active mentally so large a part of your time. Have no fear. No man ever went insane or had a breakdown from mental overwork, but a lot have gone insane or broken down from overworry and lack of exercise. Most of the talk about breakdowns from mental overwork is rationalization. The idle and the ignorant are the ones who suffer most from neuroses; not those who are exceedingly busy.

2. Always study with the intent to remember. Herein lies the cause for much forgetfulness. Occasionally, a teacher repeats certain outlines of lectures to his students and asks them to memorize the outlines. Later on he finds that he himself cannot repeat the outline because he simply dictated the material from his lecture notes. Whenever you study, do so with a determination to remember the things studied and you will be surprised how easy it is to recall your past mental efforts.

3. Stop frequently during your studying and check up what you have learned. Compel yourself to recall what you are learning. Never do straightaway reading but spend about 40 per cent of your time reciting to yourself. If you cannot recall what you have read, turn back and read it again. By a little practice along this line you will treble your ability to remember what you have covered.

4. Keep active mentally. Keep your mind on your work. Shun daydreaming. Whenever you find yourself gliding off into daydreams or irrelevant meditations, bring yourself back sharply. Let each digression act as a reminder to get back to the job at hand.

5. Use repetition. You should not expect to recall everything that you study unless you repeat the difficult parts over and

over. In the case of definitions of technical terms, formulas, dates, and outlines, where the material has few natural clues for recall, do not hesitate to commit to memory verbatim. Of course, parrotlike recitation is wasteful, but do not consider yourself above mechanical repetition of certain material.

6. In committing to memory it is better to read aloud than to read silently and it is better to read to some one else than to yourself. Attention is better sustained in this way, because an appeal is made to the ear as well as to the eye and some help is gotten from the "feel" of the words in the throat and mouth. The value of reading to another person is that it promotes accuracy of thinking and insures proper emphasis of the several ideas.

7. Attempt to remember only the important material. Confine your efforts to the essential and relegate the nonessential to references to the dictionary, encyclopedia, and textbooks. Some memory systems give elaborate suggestions for the remembering of numbers on box cars. Do not waste your time trying to remember box car numbers, football statistics, or stock quotations, unless these things are important to your vocation or recreation.

8. Carry the learning of important items beyond the point necessary for immediate recall. Experiments show that we forget about 60 per cent of material barely learned within one day after learning. This means that information necessary in your life work must be studied more than is sufficient barely to recall it the next day. The fading of impressions must be met by overlearning. Superficial learning of the spelling of a word may satisfy the immediate need, but it will not satisfy the needs of correct spelling a year later.

9. Space your study. Experiments have shown that it is better to memorize a certain amount of material at intervals than to try to complete the job at one sitting. Do not try to do seven hours of studying in one evening of each week, but study one hour on seven evenings of each week. This allows the synaptic connections to "settle" before the mental energy is directed elsewhere.

10. If necessary, invent some artificial scheme for learning and recalling material which lacks rational associations. This is seldom necessary, but may be helpful in recalling material, such as the height of the volcano of Fujiyama in Japan, which is

12,365 feet. Simply remember that we have 12 months and 365 days in the year.

Or you can use acrostics. As one man said: "In my public school days we had a speaker give us a talk once a month. Of the fifty or more talks which I heard I recall the subject of but one. In that case the speaker's subject was 'Grow' and the method of growth which he suggested was 'Go right on working.' The first letter of each word forms the word 'Grow.'" Acrostics can be used to advantage in remembering lists of words or names.

For temporary recall, it may be very helpful to try to visualize facts or principles. Try to picture them in unusual lights, colors, positions, etc. However, it is best to depend upon logical connections by understanding the relationships of the material to be remembered.

Memorizing names and faces of people.—Remembering the names of people whom we meet is not a mysterious gift that is given to politicians and denied to others. The politician finds it necessary to know people's names when he meets them and he consciously practices learning them. He seriously wants to know their names. Students in laboratory courses in psychology have taken part in an experiment where they repeated the colors in a color-naming test. The colors were only five in number and were irregularly arranged in one hundred bits, each of the five colors appearing twenty times. After the colors had been named over as often as two hundred times by each student, not one student could repeat the colors from memory in correct sequential order. Their efforts had been concentrated upon naming the bits of color as seen and not in connecting them in a series that could be remembered. Similarly, when we meet strangers, our attention is concentrated upon the impression that we make on the stranger and not upon knowing his name. We are too conscious of ourselves to grasp the name of the stranger. Our self-consciousness will tend to disappear if we determine to know and remember the names of those whom we meet.

Quite frequently, when we meet strangers and are formally introduced to them, we do not hear the name, or, if we

do hear it, we get it incorrectly. To insure clarity, we should spell the name and ask its owner whether it is correctly spelled and pronounced. The chairmen at business men's luncheon clubs frequently ask each member to stand up and state his business affiliation. After this ceremony is over, few, if any, have learned the names. Most of the names are mumbled, and repeated too rapidly to make any neural impression. If members of clubs wish to become acquainted, the leader should ask the secretary to write each name on a blackboard or have each person write his own name on the board. Each of the other members should then write, on a piece of paper, the name of each stranger and try to connect the name and person in his own mind. Before the meeting ends, each person should try to recall the name of each member and verify his recollection.

A similar method can be used at bridge parties, dances, and banquets. Here the formal introduction must be hurried by the hosts and a request for enough time to write down each name and verify it would break into the smoothness of the occasion. However, when the guests are seated or participating in the activities, then the names of strangers can be requested from a near-by associate. Effort should be made to meet the strangers and learn something about their personalities.

Some memory-training systems advise the student to connect the name of the stranger in a grotesque or irrelevant way, as, Mr. Pitts might remind us of the fiery pit—hell. Or, Mr. Long may be very short and the contrast seems to enable us to associate the name with his height. However, such irrational associations are not nearly so effective as a logical connection of clear-cut pictures or sets of facts regarding the personality of each stranger. The time and effort expended in making such incongruous connections can be spent more profitably in making logical connections of correct facts about the person.

The feeling tone in names must also be recognized.

Persons whom we like, we remember. The name of the girl at the dance who is most attractive to the youth will be remembered for years. He puts forth effort to learn her name, telephone number, and other items of information. Conversely, we tend to forget those whom we dislike or do not care for. If a number of older men are asked to state the number of times they were engaged to girls before they were married, one is apt to find that those who were engaged to three or more girls cannot recall their names. They cannot recall them simply because some unpleasant experiences are associated with their memories. The true politician likes people and his pleasant feeling toward them assists him in recalling their names.

When the name of the person is to be fixed so that it can be recalled, it should be repeated during the conversation as often as politeness permits. The average individual is able to recall about one-third more names when he has spoken the name once than when he has remained silent.[2] The salesman should get into the habit of prefacing many of his statements with "Mr. Prospect," and ending some of them with "Do you agree, Mr. Prospect?" After the stranger has left one's presence, it is well to think of him—not as "that fellow in the blue suit" but by name in one's thoughts of him. And he should be thought of in terms of a clear visual image.

Frequency of Use and Error.—*Frequency of Use and Error* is a principle worked out and successfully applied by Dr. John A. Stevenson, Vice President of the Equitable Life Assurance Society. This principle works, as proved by Mr. Stevenson himself, for he has had a remarkably successful career. He has been salesman, sales manager, college professor, and at the age of thirty-four has attained his present high position in the business world.

This principle can be applied by any one anywhere and is very simple. It is so simple that one is likely to say that

[2] Burtt, Harold E., and Beck, A. C.: Remembering Names Connected with Faces," *Journal of Industrial Psychology*, January, 1928, pp. 34-38.

it has always been known in a general way. But, since it is simple, it can be applied with profit to many jobs. When applied to an employee's tasks it can be stated:

Frequency of Use means that you:

1. Make a list of the things which you use or do in your daily work.
2. Find out how to improve these things which you use or do.
3. Perform your daily work according to the improved methods which you have discovered or found advisable.

Frequency of Error means that you:

1. Make a list of the mistakes which you often make in your daily work.
2. Find out how to eliminate these errors.
3. Eliminate the errors in your daily work.

Let me illustrate. Suppose that you are a shoe salesman and are selling shoes of various kinds of leather and prices. Make a list of the things you do each day, such as meeting customers, finding out the kind of shoes they want, measuring their feet, finding shoes from stock which they might want, making the sales, giving change, etc. Then find out how to improve each one of the things you constantly do and apply your improved methods.

Now make a list of the errors you make, such as saying the wrong things to customers, making grammatical errors, misjudging the size of shoe needed, etc. Learn how to correct these errors. Then eliminate them from your daily work.

It all sounds very trite, but it is more easily said than done. Just to find how interesting and practical it is, let the reader take two sheets of paper and on the one make a list of the "Frequencies of Use" and on the other "Frequencies of Error" of his own vocation. It is well for the employee to work out the principle for his particular work and try it. The results may be surprisingly effective.

Utilizing time efficiently.—*System Magazine*[3] sent a questionnaire to 350 company presidents and asked them how they spent their business hours. The reported percentages were as follows:

TABLE XXXIV

	Percentage of time	*In terms of an 8-hour day*
Conferences (in the company or outside)	24.2	2
Personal inspection of business operations	15.3	1¼
Answering mail	13.2	1
Other business activities	13.6	1
Examining reports	9.1	¾
Business reading	9.0	¾
Planning new policies	7.1	¾
Inspection of customers' conditions	8.5	½

It is obviously impossible to specify how much time any employee or executive should spend on any operation. However, these data are presented to indicate the averages for responsible executives. The place and occasions where the business man's time is wasted or misused are not in the performance of his regular duties, but in the attention given to the bothersome trivialities adequately described by James Gordon Gilkey in his "Secrets of Effective Living":

> Once I read about a man who was tied down and the ants ate him.
> His fingers, his ears, his eyes, everything.
> At last they even devoured his brain,
> Emptying his skull bit by bit.
> I am tied down, too, and little things are eating me—
> The friend who calls me on the phone and talks and talks,
> The agent who is determined to sell me a new mop,
> The children who quarrel and will not do their lessons,
> The letters that must be answered before night somehow,
> The ice man's short weight, the butcher's carelessness,
> All these little things are devouring me alive . . .

These time-consumers that "eat" us are social obligations, "being a good fellow," interviewing insistent salesmen, eating too much, and chasing ephemeral ideas that appear promising but end in rainbows without any pots of gold.

Our social obligations of attending receptions, playing

[3] "He Always Has Time," *System, the Magazine of Business*, September, 1923, pp. 274-276.

bridge, golfing, driving the auto just for a drive, formal dinners, poker, fraternal meetings, conventions, and community drives, all appear essential to the development of a balanced personality and vocational advancement. In many cases, wives insist upon them. Some of these affairs do bring us into touch with people whom we ought to know. Some do bring in business later, but it is a waste of time in the long run to cultivate people merely for the sake of getting business rather than as the result of a natural liking for them. All these side lines become dangerous when they control us. Selling tickets for charity affairs, putting up decorations, giving bail for friends, buying theater tickets, lending money, giving talks before Sunday schools, writing letters of introduction, etc., all have their place, but they tend to devour time and effort and end nowhere. It is seldom that people trust their fortunes or important problems to the accommodating man. When we are seriously ill we go to the doctor who is so busy professionally that he has no time to give to little things. We prefer to deposit our money in the bank whose president is noted for his ability and stability rather than in the bank whose president is a public beast of burden. To achieve things worthy of the respect of our fellows, we must respect the obligations of our own work to the extent that we fulfill them before we oblige others.

The ambitious business man need not confuse the dutiful performance of his own duties with an abrupt disregard for the needs and feelings of others. To refuse to take time to be accommodating to others does not necessitate coldness of manner. The daily acts of the worthwhile life can be invested with cordiality and friendliness. Our social relations should be more than mechanically reciprocal. They can be made delightfully pleasing. If a person lends us a book, we can do more than just thank him. We can prove to him that we read and enjoyed it. If we dine in a restaurant on a fifty-fifty basis, we should not forget the tips. We need not say to a person, "I see you do not remember

me," but can state our own name without reminding him of his failure. When we win a big score in a bridge game, we need not go into a detailed recital of how it was done. When we greet the stenographer and the elevator operator, we can make the greeting just as friendly as the one we bestow upon our best customers. These little daily acts do not consume much time, but they do bring greater returns in human happiness and popularity than years of trifling services.

Getting rid of mesmeric salesmen.—Salesmen who can render a real service should always receive a courteous and prompt interview. They have a right to continue to call time after time in some industries and for some prospects. However, many executives find a large amount of their time wasted in listening to insistent salesmen who cannot possibly render them any service. They should be given a prompt and emphatic "no." To allow them to continue to talk or visit merely wastes their time which should be offered a logical prospect. Hundreds of books have been written which give the salesman suggestions on how to sell the prospect, but no books have been published which show the beleaguered prospect how to overcome the salesman.

Five or six methods have been offered by buyers and these are stated in the second person.

First and easiest, *watch the salesman's technique.* Study his method of selling. Analyze his sales canvass for its reported stages—the approach, arousing desire, establishing confidence, and inducing action. Just as the hypnotist cannot hypnotize a subject so long as the subject studies the hypnotist, so the salesman cannot sell the prospect who studies his technique.

Second, *heckle the salesman.* Interrupt him on the slightest pretext and argue. If the salesman refuses to argue at first, just keep after him with more criticisms and get him irritated. Eventually, he will have to let go of his self-control and argue, too. Try to make him so angry that he will say: "Mr. Prospect, you are so gol-darn cantankerous, I wouldn't sell you if I could."

Third, *use the agreeable method.* Interrupt him only to agree with him. Keep on telling him: "You certainly have a wonderful proposition. Say, you're an unusually good salesman, etc." Let the salesman think he is "hooking" you and then when he presents the order book, say: "You're a fine fellow and I like you but I simply can't buy right now. Perhaps some other time, when I'm not so busy, I can do something for you. Good-by."

Fourth, *if the salesman comes into your office, turn the one available chair so that it faces away from yourself.* When the caller comes to your desk to sit down, he will know that he is not expected to do so and he will have to stand. One executive even went so far as to fasten the visitor's chair to the floor so that it could not be moved near him when the salesman became confidential.

Fifth, *interview the salesman where he will be at a disadvantage.* Talk to him through an open window or over a counter or in a corridor. If possible, continue to walk to the door and, when you get him there, shake hands with him and bid him, "Good-by."

Obtaining promotion in the large business concern.—Inasmuch as most business men in America work for an employer rather than for themselves, we shall discuss methods of gaining promotion in the modern corporation.

1. One factor that will greatly aid an employee in obtaining advancement is to work for an executive who likes him. No one can study the personnel of modern business and claim that all men who deserve to hold good positions are actually holding them. Nor do all the executives who now hold important positions deserve them. Some have gained their high executive positions by inheritance, others have married strategically, and some have fallen into their positions by a chance combination of fortunate circumstances. Many men gain their promotions simply because they are moderately capable, and the man above them hap-

pens to like them. Just as the choosing of a wife or a husband is the result of unconscious influences rather than scientific analysis, so, many of the manager's selections of men for promotion are the results of chance personal liking. The employee who wishes to be promoted should seek the good will and admiration of his superior or find a new superior who does like him.

Some readers may say: "If there is anything I hate it's a bootlicker, a yes-man, or the employee who sticks around the boss." Yet, we should not accuse the retailer of being a fawning flatterer, because he dresses up his windows to attract those who are his logical buyers. The merchant merely utilizes some concrete advantages of his wares. In like manner, the corporation employee should try to attract the prospective buyers of his services by appealing to his buyers in a way that can be understood.

2. The corporation clerical worker, salesman, or junior executive may be asking himself the question, "Why doesn't some one notice me?" If he is, he can answer his own question by asking himself, "What 'window dressing' have I done that will bring about recognition or a raise in pay?" By this it is not inferred that an employee should put every item of ability into the "show case" and have no reserve in the "warehouse." It is well, however, to give emphasis to the need for concrete evidence of ability, presented in such form that one's colleagues, superiors, and subordinates may be able to judge one's worth.

We all tend to measure human ability and accomplishments in terms of the tangible—things that we can see, hear, smell, taste, or count in a definite manner. That is one reason why we find it easy to admire the wealthy man. We can say that he has accumulated $892,397.62 in the past forty years. Dollars are definite and concrete. Everyone understands what is meant by houses, automobiles, number of employees, talks or addresses made, and articles written. These things are far more easily grasped by the human mind than the abstract qualities of ability, capacity,

judgment, effort, and initiative that made possible the dollars and automobiles. The ambitious corporation employee may have the abstract traits that deserve promotion, but he must put them into concrete form and display them to attract the right customers. The white-collar man must put concrete evidence into his "show case." The employee should make charts or diagrams of the methods used in his work. It may be possible, but it is highly improbable, that the supervisor knows how each employee does his work. The other men in the organization are so busy with their own problems that they do not have time to study what he is really doing. The daily efforts of the worker may seem childishly simple to himself, but they are mysteries to others. Therefore, it is well to make some charts or diagrams that will tell those around and above the employee about the methods he is constantly using and the work he is doing. These charts should be so simple that any one can understand them and the effects that the job is supposed to accomplish in the organization. If possible, the chart should show how the work was done years ago and how it is done now. Such a chart need not be a mere gesture to attract attention to one's self. It should enable the employee to locate some avenues which can be extended or improved.

3. A third possibility for the "show case" is that of devising new systems or methods which will make more money or decrease costs for the employer. The alert employee who seeks methods of making money or cutting costs is often surprised to find some good ideas which others have overlooked or "kicked around." It is well to pick them up, polish them, try them out, and present them to superiors with a description of their values and limitations.

In some cases, the general manager and the twenty-dollar clerk have the same grade of brains. But the clerk tends to think in twenty-dollar channels—of his own needs, grouches, enmities, and desires for luxuries. How can he expect to merit a raise when his brain cells are working overtime on

personal matters, while those of the big men in the company are active on company problems of volume production, sales resistance, net profits, and lower costs? When the employee does find a good idea for his employer, he should collect some facts and figures to prove it. His suggestions should be shown to some of his trusted fellow employees, and, before they are presented to the "big boss," a sales talk of the values should be prepared in advance.

4. If an employee is holding a mediocre job and the general manager does not know him, then he should not jump over the heads of his superiors in trying to get recognition from the key man of the company. He must always remember that chances for promotion are determined by his supervisory executive, because the "big guns" of the company will consult their department heads before raising the pay or the job of an employee. This means that it may be necessary, at times, to neglect one's own "show case" and help to trim that of one's superior. This is merely a part of the game of business.

5. A fifth possible way of advertising one's ability is that of making special reports on existing conditions of the business or conditions which may affect the business. Some executives have a fetishlike admiration for reports that present column after column of figures. Sometimes reports of this sort are not read, but they usually create a favorable impression at the time. A consultant related an experience in a concern where he was to study certain conditions. At the end of his job he gave the manager a complete report of the situation. Several days later, the manager told him that he had read the report with much pleasure, but that it failed to show him what to do in the future. The writer took the report from his desk and turned to the thirty-six pages where the details which were thought to have been omitted were given. As a matter of fact, the manager had not read the report. He just glanced through it and judged it very largely on the basis of its external appearance—its size, typing, charts, and quality of paper. The standards

which he used in evaluating hours of mental toil gave a shock and a lesson which indicated that it is well to spend a large amount of time on the artistic aspects of reports. The colored charts may be unintelligible to a genius; but they should be beautiful enough to decorate the walls of an office carpeted with oriental rugs.

6. Another aspect of the report as a means of gaining recognition is that of the trade journal. Many office men think that it is necessary to be a professor of English, or to use a Harvard accent, to be able to write an article for a trade journal. Such is not the case. The trade journals are interested in shop talk, and any systems or ideas which have been of value to men in their field will be of interest to their readers. The good ideas should be described in as pleasing a manner as possible, but efforts should be concentrated on the ideas rather than the form. The editors will revise the article to fit the vernacular of the publication. Of course, one must be careful not to divulge information that should remain in the files of the employer. If in doubt on this matter, the manuscripts can be submitted to the proper authorities of the company before they are sent to the publisher. The average executive will probably be pleased to know that he has some one in his organization who writes articles for his colleagues and competitors to read.

7. The head of a department can develop a training system for his employees. He can prepare a manual of instructions and conduct regular classes for them. Some one can act as secretary at the meetings, and he can present some information to the management that would not be uncovered without such a training group.

8. If possible to do so, it is well to attend some of the conventions of associations that influence the business. A good rule is never to attend a convention without making a report of valuable facts to the management. One may neglect to do this, because the speeches will be printed and sent to the company later on. This fact should not deter one from making a report, because a delegate should study the

undercurrents of the conferences and pick up some valuable points that are not evident in the published reports. This is especially true of trends or tendencies of the times which are seldom described in words, but which the experienced technician uncovers when he meets experts in his own field. The management should be given the benefit of the meetings attended, even though the employee has to pay his own expenses to the convention.

9. To gain promotion, it is important to associate with the men and women who have demonstrated their abilities. The old-timers in the business game can give valuable pointers. Membership in pertinent trade associations will stimulate the employee to work and give him valuable contacts.

10. A final suggestion for the employee's show window may be illustrated in a recent occurrence. A certain department head operated his department with the same equipment bequeathed him some years before by his predecessor. The executive knew that his equipment and methods were slightly obsolete, but he thought that he was saving money for his employer by laboriously plugging along. He hated to ask his employer to spend money for needed machinery. The general manager finally decided that this department was too antiquated for the rest of the organization, fired the department head, and put a new man in charge.

The new man, realizing that he had to dress up the windows, at once spent all the money he could possibly get in making the department ultra modern. The new equipment could be seen and admired by his employer. It was tangible evidence of ability. Of course it cost a lot of money, but it was worth it. The new department head acquired the reputation of using progressive methods and is about to be promoted again.

The advancement of any man in business depends upon his ability to please others. The owner of a business must please his customers. The employee of a corporation must

please the man who is responsible for his efforts. His question should be, "What does this man want me to do?" not "What should I do for my best interests?" If the boss wants his men to come to work at seven o'clock in the morning, then seven o'clock is the proper time to start work. If he dislikes men who wear mustaches and part their hair in the middle, then the employee should go without a mustache and comb his hair in a satisfactory manner. If an employer is whimsical, it is vastly easier to please his whimsicalities than to try to change him. Boss management is almost as important as scientific management. If adjustment to a superior's peculiarities is too difficult or degrading, then a new employer should be sought.

Of course, every employer really wants results above all things else. If a special kind of bolt is needed for an emergency, it does little good to telephone all the local sources of bolt supplies and find that no one in the city can furnish the needed bolt. Excuses will not satisfy. The bolt must be obtained in another city or made to order. Most of the personal factors that produce results are not the work of genius but of habits of persistence and character in doing well the routine tasks of the job. However, an employee of a large corporation may be doing good work, but the right executives may not realize it. Just as advertising is necessary in selling goods, so legitimate presentations of one's good works may be helpful to personal advancement in the large corporation. Big business men are looking for men and women who can think in their terms. When they find an employee who dresses up his window, works reasonably hard, and plays the game fairly, promotion is almost automatic. However, the raise in pay may not be immediate, because the employer will want to know whether the employee's hit was mere chance or whether he will continue to direct his firing at the same mark.

Difficulties.—The story is told of a man who always tinkered with his auto and kept it in repair himself. His repair work took a great deal of his time and often irritated

his temper. By and by he died and went to heaven. Upon his entrance to the realm of peace and comfort, St. Peter told him that all the conveniences of heaven were at his command and anything that he might wish would be given him. The newcomer thought for a moment and then said, "St. Peter, when I was back on the earth I always had a lot of trouble with my car. What I want most of all is a car that needs no repairing or attention regardless of what may happen to it." St. Peter said, "You shall have your car." He pushed a signal button and the car was produced.

The autoist proudly took it and drove it up and down the golden streets, through the endless flower gardens, and past the myriad angels. He drove on and on and on and all went well. Never a puncture or an exhaustion of gas. After a time the novelty of the plaything wore off and the man decided that he would puncture a tire so that he could repair it. He drove over nails but the tire was as good as ever. He then "monkeyed" with the carburetor but the car kept going as before. Disappointed, he took off a wheel but it rode as smoothly as ever. Exasperated, he took out the engine and threw it away but the car operated perfectly. Finally, the monotony of the perfection became unbearable and he drove it back to St. Peter.

"St. Peter," he said, "I now find that the real joy in motoring was in the difficulties which had to be overcome. Take your perfect car and give me back my good old car, the same kind I had on earth."

This story illustrates the point that the difficulties which one must overcome in attaining success make life appreciated. In fact, no real success or enjoyment of life can be obtained without the conquering of difficulties. The great men of civilization were those who fought the obstacles in their way. When their enemies jeered and tried to hold them back, they were not discouraged but pressed onward to the goal they believed to be right. Intellectually, these men were not always exceptional, but they persisted in the face of difficulties. They had the habit of persistence when adverse conditions thwarted them.

We all energize below the maximum. Old habits of childhood retard our speed. Fears, doubts, ill health, superstitions, overagreeableness, tactlessness, and hundreds of other psychological burdens weigh us down. If we could realize that most of the psychological problems listed by one thousand normal people in Chapter I are merely the results of accidental or incidental influences we could often break away from them. Psychologists have made definite progress in analyzing the causes of our psychological disturbances, but analysis has not carried us far enough. The next generation will probably give us better methods of treating these maladjustments. We shall soon have schools of the "mind" where so-called normal people who are near great or near normal, can go and obtain a new set of neural patterns that will supersede the burdensome ones formed in earlier life. We are gradually approaching that desirable stage where we do not look askance upon the person who consults a psychiatrist or a psychologist. We now regard a mental patient in the same constructive light as any sick person.

When teachers and parents, particularly mothers, acquire the art of teaching children that the way out of a difficulty is to analyze the situation and take the necessary steps to solve the problem by adjustment to natural laws, then we shall have lively urges and adjusted personalities. We should not teach children to pity the sick and the poor or to cry for the dead. Far better to teach them how to avoid such conditions, and, when death and the natural events of life befall us, we should accept them as natural and make a happy adjustment. Our philosophy of life must give us a zest for life itself. The game of life in itself is worth while.

Projects.

1. Analyze a definite job according to the principal of Frequency of Use and Error.

2. For the executive to enjoy life and business, it is essential that he have a philosophy of life and the appreciation of the value of business to society. Which chapter in this book tends to supply such a philosophy and appreciation?

3. Collect pictures of people from magazines and practice the memorizing of their names. Outline a helpful procedure.

4. Collect some examples which prove that we do or do not have a will.

5. When an executive requests a subordinate to give him a report, the executive usually wants it as soon as possible. After the report has been submitted, the executive may neglect to read it for several days or weeks. What is the cause of this habit on the part of the executive? How can the subordinate adjust himself to such wishes of his superior?

6. To what extent does playing the stock market decrease the efficiency of business executives who do it? Should the ambitious business man determine not to bother with speculation?

7. Where can the business man obtain his best ideas or do his most effective thinking—in the office, at home, in the club, on the golf course, or other places?

8. Is a clean desk indicative of personal efficiency? Make a study of this problem by preparing a list of best executives whom you know and then observe the tops of their desks.

9. What are the psychological reasons for the fact that some executives find it difficult to delegate to subordinates routine tasks?

10. Experiments indicate that muscular tension and thinking go together. In one experiment, when the muscles of the arms were tensed, the learning time was reduced 13 per cent, and arithmetical problems were solved 10 per cent more rapidly and 6 per cent more accurately. Should the executive attempt to keep his muscles in a state of tension when he is on the job?

11. One of the most common methods of judging the personality of a person is his conversation. A number of business men were asked what words, phrases, and questions they disliked to hear from employees. The following list was furnished but is not to be considered as complete:

ain't	chuck	crook	dumb-bell	high brow
brass	coward	crude	fat	huh?
bum	crab	cuckoo	fool	idiot

junk	miser	punk	shorty	stink
kid	nut	rot	skinny	stuff
liar	old maid	runt	slob	sucker
loafer	piker	shack	sloppy	swell
low brow	pill	shanty	snob	yeah
mess	prune	simp	spit	yellow

QUESTIONS DISLIKED IN BUSINESS

D'ja eat?	Are you feeling well?
How do you know?	Haven't you finished yet?
How much did it cost?	How do you get that way?
Is that so?	How's every little thing?
What did I tell you?	How much did you pay?
What's it to you?	How's your old man?
What's the big idea?	Isn't that grand?
What's the matter?	What did you do that for?
Where are you going?	What makes you so sure?
Why bring that up?	What's on your mind?
Will you do me a favor?	Why don't you live in a good town?

EXPRESSIONS DISLIKED IN BUSINESS

And how.	I told you so.
After me, you come first.	Make it snappy.
Bad egg.	Make whoopee.
Beautiful, but dumb.	Mind your own business.
Believe me.	My luck is against me.
Cut it out.	No kiddin'!
Do tell.	None of your business.
Don't trouble yourself.	Out of date.
He means well.	Prove it to me.
Hello, old sock!	Shut up.
I done it.	That's just like you.
I don't believe it.	That's not true.
I doubt you.	You flatter me.
I'll say so.	You must do this.
I'll tell the world.	You tell 'em.

a. Ask a number of your associates to check those items on these lists of words, questions, and expressions that they dislike to hear.

b. Note the number of times you hear these terms used by low-salaried and high-salaried business men.

c. To what factors do you attribute any differences in their usage?

CHAPTER XIII

The Executive and the Individual Employee

Executive ability is an unstandardized term. To ask a hundred executives to define their functions would result in many different definitions. The attempts that have been made to define executive functions and characteristics have yielded meager results. We shall not attempt to define executive ability or to mark the boundaries of the executive's activities. Nor shall we discuss the problems of the nonhuman phases of business organization and management, such as budgets, graphs, inventories, periodic reports, cost systems, production control, etc. Our treatment will be limited to the human phases of management in the light of the best empirical evidence available. Few, if any, methods of performing executive functions have been tried in a scientific manner; hence, no definite laws or principles can be offered as the result of objectively conducted experiments. Most of the literature about the psychological aspects of management is simply subjective rationalizations which are made by experienced business men who introspect their retrospection. However, we cannot afford to ignore entirely the viewpoints of those who have blazed the trails of American business. We must recognize that these nonscientific executives of the past have given us the greatest era of industrial and commercial prosperity that the world has ever known. Until sound scientific evidence is available, we shall limit ourselves to a statement of those principles which appear to be most commonly accepted by the leaders in business.

The humanness of executives.—The most striking characteristic of great executives seems to be their humanness. They are not gods, as some of their underlings and a few of

the executives themselves seem to think. Employees who are closely associated with the key executives soon learn the whimsicalities, idiosyncrasies, and eccentricities of their superiors just as the small child soon recognizes the signs that indicate the pleasant and unpleasant future actions of the parent. When father comes down to breakfast and scowls at the cat, the small son knows that he had better wait until some other day to ask for the new bicycle. Just so with the executives. The employees soon learn the signs of danger and favor. Word is soon passed around that the big boss must not be approached in the morning until he has finished his first pipe of tobacco. A certain executive may discharge his subordinates rather recklessly, but they know that if they come to see him after he has paid his dinner check, they will be reinstated. Others must be approached by means of flattery, a discussion of duck hunting, or a request for information about some new system that the boss is promulgating at that season. Executives who pride themselves on the impersonal nature of their methods are quite likely to be very human and their humanness is often better known by the employees than by themselves. Many a private secretary could tell her chief about his peculiarities that have been "worked" by his subordinates for years.

The heads of some corporations who claim that all their employees are members of one big family may be unaware of the fact that the "family" is riddled with "politics." One of the most frequently met examples of company politics is that of the company that has been developed through years of effort by one strong man who heads the concern. When he becomes aged, he gradually passes on to others some of his responsibilities and two factions then tend to develop. One faction is loyal to the "old man" and continues his policies and methods. The other faction develops among the leaders of the younger employees and the two groups indulge in subtle little skirmishes. A new man who comes into the organization is soon lined up, often uncon-

sciously, with one of these factions, and then the other faction awaits an opportunity to "knife" him. Consultants and others who pass in and out of many organizations soon learn the presence of such factions and guard against arousing antagonisms. It is for this reason that few experienced consultants care to do any work in a firm unless they are definitely and firmly backed up by some strongly intrenched executive of the company who has the unwavering confidence of his board of directors. Any new man who accepts a position of importance in a company should be on his guard for the possible machinations of politicians within the company. Company politics may be present in a concern, even though the head of the company or the person who does the hiring boasts about the team spirit of the executives and employees.

Religion is a common cause of company politics. The president of one company stated that no attention is ever paid to the religion of his employees. No applicant is ever asked about his religion, and yet, when the seventeen leading executives and department heads of that company met at a dinner, sixteen of them were members of the same type of church and twelve of them belonged to the same secret fraternal organization! Business analysts have found companies where a single department head gradually discharged the employees who were members of an opposing religious denomination in order to hire adherents of his own faith. Some concerns find it necessary to ask for the religious affiliation of their employees and annually study the figures for each department so that factional differences in religion may be avoided.

Another factor that contributes to company politics is that of special discounts to certain big customers. The head of the company may ignore the sales manager and grant special discounts to customers who have been with the company for years or to men who are his personal friends. When irregular discounts are given some customers, factions are likely to arise. Some of the salesmen

will learn about the discounts and, when they wish to favor another customer, they will ignore the sales manager to get the discount. A barrier of feeling may then arise between the leading executives who promote the discounts and those who oppose them, and some of the employees will affiliate themselves with the executive or faction which appears to have the best chances of winning if an open struggle takes place.

The executive who happens to find himself in the subtle undercurrents of company politics and managerial lobbies is sometimes at a loss as to the best procedure for himself. He cannot go to the head of the company and explain his position, because he has no evidence to present, nor would he wish to do so if he had ample evidence. He cannot line up with one faction and take part in harassing the other side. He himself wishes to promote some ideas of his own and he may have to negotiate with a lobbyist in order to accomplish the things he wants done. Usually, his best procedure is to ignore the politics and endeavor to sell his plans to the management on the merits of the plans rather than through factional support. In most concerns such an aim is fairly easy to achieve. Most executives gain their ends by honest means. However, since our human prejudices afflict all of us, we cannot condemn the other person when he allows his prejudices to influence him. So long as human nature remains as it is, we shall have a certain amount of lobbying in business. Ambitious executives will explain their schemes to associates or others who have "logs to roll," and obtain their coöperation for ends that may benefit the lobbyist as well as, or rather than, the company. Such lobbying may be legitimate if it is done without an attempt at concealment and if the purpose of the maneuvering is that of profits for the company rather than for the person who manipulates the lobby.

Executive policies in dealing with the individual employee.—Hundreds of articles have discussed the characteristics, policies, and attitudes of the responsible business ex-

ecutives, and one set of rules might be considered as good as another. However, a few of these rules or policies, which seem to be more fundamental than others, are given below:

1. *The employee prefers to be treated as an individual.*—Successful executives seem to follow opposing policies with respect to the individuality of the employee. Some executives learn names, addresses, family life, and personal history of each of their employees and take a friendly interest in his welfare. Other executives spend little or no time in learning of the intimate lives of their employees, but devote themselves to the development of a team spirit, playing the game of business, fighting competitors, and inventing new systems of production in order that costs may be lowered. They prefer to study the accomplishments of groups of employees rather than of specific individuals. Each of these methods probably has its advantages and both must be used at times in every concern. However, the employee is an individual and has dreams for himself rather than visions for his group or the company. He has specific problems, such as paying his bills, rearing his children, and attaining worthwhileness. Executives who attempt to develop a family spirit in the organization by dealing with groups rather than individuals have chosen a difficult path to travel. In spite of our dependence upon the groups about us, we are all primarily interested in ourselves, and the executive who adopts a policy of knowing his employees as individuals, their family history, personal problems, etc., probably will have a better team spirit than he who concentrates upon group methods, such as welfare work, house organ editorials, bulletin board notices, personnel record systems, company picnics, and annual banquets.

A personal interest in each employee does not necessitate a daily round among the employees to inquire about the babies' new teeth and the headaches of grandmothers, but it does mean that the executive will "back up" the employee who wishes to improve his position and worth. He must be willing to help a good employee get another job in another

department or firm if the employee is ready for a better job. Comparatively few executives are willing to train men and then let them go to some one else, even though it may be better for the employee. It is easy to refuse to release the good men and women in the organization, even though they may be getting gray and habit-bound, when a gentle prod from their supervisor might lift them into a better job and a new vocational life. A personal interest in the employee means that the executive will occasionally call into his office each of his good employees and learn their hopes, clarify their ambitions, suggest courses of training, and outline definite vocational programs that will benefit the employee first, the company second, and the executive last. An honest effort of this kind seems to develop more *esprit de corps* than lectures on "family" spirit or schemes of profit sharing.

2. *The employee likes to know that his superior has confidence in him.*—To have the employee realize that his superior has confidence in him requires a policy that does not produce the typical "yes-man." Many an executive is not very sure of himself and his job, so he cannot admit any thoughts of incompetence or weakness on his own part. When he rails at the "dumbness" or lack of initiative of his subordinates, he is really telling his associates that he is not sure of himself. The employees know that, if they attempt to assert themselves or to plead for what they believe to be right, they are likely to be discharged and most of them cannot afford to be discharged. Many an employee is an obedient "yes-man," because he loves his family and must provide for them at the cost of his own individuality. Interestingly enough, when executives who have prided themselves on their impartiality and willingness to face facts have asked their employees to rate their executive conduct, they have received ratings which indicated that the employees considered them bulldozers and tyrants. Sometimes such tyranny is accidental and any executive is apt to have some disgruntled subordinates. If an executive wishes to learn the attitude of his employees, he can do so

by the means of a special rating scale. The employees can be asked to rate the effectiveness of personnel policies and the treatment of employees by checking a form list of traits or terms and give the ratings to a third individual in whom the employees have confidence.

3. *Praise develops employees more readily than criticism.* —One executive sat in his private office, waved his hand toward his employees, and said: "There isn't a man or woman out there who has any initiative. Not one of the seventy-two would be able to take my place if I were to leave. They are all afraid of their 'hides.' They're scared for fear they will lose their jobs." The natural reaction to such a statement is that the executive himself is responsible for such a condition. If he wishes to be a despot over his group and be undisturbed by those who disagree with his wishes, he can readily develop an organization of trembling vassals. It is easier to develop a group of colorless employees than to build an organization of men and women who think and know that their ideas and personalities will be given appreciative recognition. If an irate employee were to come into the office of his superior and plainly and emphatically tell him that he was incompetent to manage a certain part of his own department, the average executive would usher the employee into the paymaster's office for his final pay. However, one of America's leading executives had that happen to him and he promptly assigned the radical to the work he criticized. Later, the employee became one of the best executives of the company.

When criticism must be given, it can be given so harshly that the person criticized will acquire a retiring and fearful personality, or it can cause the one at fault to boil over with wrath and quit, or it can be given so that he will be benefited and strengthened for the future. The executive who aims to get the first two results is merely indicating that his criticism has become a personal rather than a company matter. He is more interested in causing the failing subordinate to feel "small" than in improving him. If kindly

directions and encouragement do not help the employee, then the company made a mistake in hiring him or the executive does not know how to develop his erring employees. Criticisms should not involve mere personalities. They should be based upon the figures, conduct, or facts that are wrong. For example, if the manager of a sales district produces a 10 per cent increase in sales and the 10 per cent should have been accomplished three months before, it does much harm and little good to tell the manager that what he has done should have been accomplished months before. If he is shown the facts in the situation and that most of the other districts under the same conditions had previously turned in their increases, it will be more effective than a harsh belittling of the manager's ability. Criticisms can often be made most effective by asking the wrongdoer a number of searching questions that will reveal his conduct in a new light. Because department heads and district managers are apt to be sensitive, some general managers address their criticisms to the department or district at fault rather than to the responsible individual. This removes the sting and may be more effective than personal censure.

Some executives believe that an employee should not be praised. Their motto is, "The absence of criticism constitutes praise." Unfortunately for business leaders, no conclusive experiments are available which would prove or disprove such a personnel policy. We shall have to limit our analysis of this question to the suggestive psychological experiments on animals and school children that throw some light on such a policy. Animals definitely learn faster when rewarded for their trial efforts than when they are ignored or punished. Experiments with school children and college students indicate, in practically all cases, that praise is better than censure or the ignoring of the individual. Professor Thomas H. Briggs of Columbia University asked 370 graduate students to state whether they worked better, the same, or worse in high school under 21 different situations. These students had not been given any preparatory

study or assignment relative to this subject. These reports were tabulated and listed with a similar report made by Donald A. Laird.[1]

TABLE XXXV

PERCENTAGES OF 92 COLLEGE STUDENTS (LAIRD) AND 370 GRADUATE STUDENTS REPORTING EFFECTS ON WORK OF CERTAIN FACTORS

	Laird			Briggs		
	Better	*Same*	*Worse*	*Better*	*Same*	*Worse*
1. Reprimands before others	26.0	40.2	33.7	40.4	13.3	46.2
2. Reprimands to others	42.7	45.4	11.9	39.4	31.9	28.8
3. Reprimands in private	48.8	39.0	12.0	83.1	9.9	6.9
4. Sarcasm before others	9.6	22.1	68.1	10.0	12.9	77.1
5. Sarcasm to others	26.0	51.2	22.6	10.0	46.2	43.8
6. Sarcasm in private	21.4	48.7	29.7	18.2	16.9	64.9
7. Ridicule before others	15.4	48.0	36.4	7.2	23.8	69.0
8. Ridicule to others	33.1	45.7	21.2	10.4	58.7	30.8
9. Ridicule in private	12.5	67.8	19.6	21.2	15.2	63.6
10. Low marks	17.3	32.6	50.0	68.1	16.1	15.8
11. Low marks to others	36.0	21.2	42.5	32.4	63.0	4.6
12. Extra work as penalty	15.2	60.6	24.0	20.0	36.4	43.6
13. Extra work to others as penalty	15.9	69.4	15.1	21.8	71.5	6.6
14. Conference by teacher with parents	41.6	29.1	29.1	85.7	12.5	1.8
15. Friendly conferences	84.3	15.7	0.0	95.6	3.9	.4
16. Public commendation	70.9	24.0	0.0	90.6	8.3	1.1
17. Public commendation to others	50.8	49.1	0.0	69.5	28.2	2.3
18. Commendation to parents	46.4	48.6	3.6	88.9	10.6	.5
19. Excuse from work as reward	66.5	30.5	2.9	79.7	17.6	2.7
20. Worked for best liked teacher				95.1	3.8	1.0
21. Worked for least liked teacher				5.9	26.9	67.2

The table indicates that, if reprimands, sarcasm, and ridicule must be used, they do less harm when rendered in private than in public. In general, praise and encouragement get the best results. Briggs also reports an objective experiment conducted in the Speyer Experimental Junior High School, where the teachers of the school discussed the relative merits of incentives. Two of the teachers who were accustomed to use severity in dealing with their pupils were asked to conduct an experiment. They first made objective tests on three lessons. The first test was administered by each teacher to his four classes. After glancing over the papers, Teacher A reprimanded the pupils severely, threatening them with punishment if they did not do better work. Teacher B, on the other hand, commended his pupils and encouraged them to do even better on the next lesson. The following day, the second test was given, and, after looking over the papers, the teachers reversed their comments—A praising and B scolding. On the third day the last test was given. Eighty-seven per cent of the pupils made better scores after commendation and encouragement than after reprimanding.

[1] Briggs, Thomas H.: "Praise and Censure as Incentives," *School and Society*, Nov. 5, 1927, p. 597.

E. B. Hurlock conducted a laboratory experiment where she used three kinds of incentives in stimulating school children of equivalent capacity. They were given a course of training in arithmetic for five days. The four groups of pupils and their respective scores are presented in Table XXXVI. The groups were:

a. *Control group.*—These pupils were trained in a separate room and were free from the special influences of groups b, c, d.

b. *Praised group.*—These pupils were praised for the good quality of their work regardless of its quality.

c. *Reproved group.*—These were reproved for the quality of their work regardless of its quality.

d. *Ignored group.*—These pupils were able to hear the praise and reproval given groups b and c, but they themselves were ignored.

TABLE XXXVI

INFLUENCE OF VARIOUS INCENTIVES UPON OUTPUT

	Day				
Groups	1	2	3	4	5
Control	11.81	12.34	11.65	10.50	11.35
Praised	11.81	16.59	18.85	18.81	20.22
Reproved	11.85	16.59	14.30	13.26	14.19
Ignored	11.84	14.19	13.30	12.92	12.38

The figures in the table are in terms of the score made in the work of the various days. Praise was the most effective incentive, when the output of the first and last days are

compared, as the record of this group was approximately 75 per cent better than that of the control group, 60 per cent better than the ignored group, and 40 per cent better than the reproved group.[2] Certainly, the results indicated that the old adage, "The absence of criticism constitutes praise," was psychologically fallacious in this experiment. At first, reproof was as effective as praise, but its stimulating effects wore off. Experiments of psychological incentives suggest what skillful executives know, namely, employees need constant attention, and the attention that inspires employees is more effective than that which depresses or frightens them.

4. *The use of humor with employees.*—Some executives have acquired the art of correcting an employee by the use of humor. This kind of censure does not refer to a jocular attitude toward grave errors, but to a manner of criticizing humorously as well as effectively. We all know that many a truth is told in jest. No objective evidence is available to show that good executives have a greater sense of humor than poor executives, but a suggestive experiment was conducted with reference to teachers. Each of twenty-four college students was asked to interview twelve or more students of the university and to ask each of them to give ratings and answers to the following:

1. Think of some of the teachers you have had in high school and college. Include some of the best and some of the poorest.

2. Write the initials of the best teacher you have had.

3. Write the initials of the poorest teacher you have had. (No definition of a good teacher or a poor teacher was given. No explanation of the purpose of the experiment was given until after the initials of the two teachers had been recorded.)

4. Rate the best teacher on the following scale of humor in the classroom:

(5) Teacher usually tells several humorous stories or anecdotes each period. The class laughs rather frequently and heartily.

[2] E. B. Hurlock, "An Evaluation of Certain Incentives Used in School Work," *Journal of Educational Psychology*, vol. 16 (1925), p. 145 ff.

(4) Teacher occasionally tells humorous stories. Class averages one good laugh per period.

(3) Humor seldom expressed. Class has one good laugh in from 5 to 10 periods.

(2) Element of humor almost absent.

(1) Element of humor absent. Teacher takes his life and work so seriously that students would not think of laughing in his classes.

5. Now rate the poorest teacher on the same scale.

The student experimenter then recorded the initials and ratings of the subject and went to the next student. When the various ratings were reported it was found that the best teachers, 284 in number, made an average of 3.95 on the above scale. The same number of poorest teachers had an average of 2.36 on the "humor scale."

It was also found that 86 of the so-called best teachers and 28 of the teachers considered the poorest had a rating of 5.

These data are presented to show, not that a high sense of humor makes a good teacher, but that a sense of humor in the classroom appears to be a trait of the good teacher more often than of the poor teacher.[3] It is not unlikely that good executives as well as good teachers have a better sense of humor than the poorer executives when dealing with employees.

5. *The executive should not generalize with the employee but deal with definite points.*—Many executives give talks to the employees at meetings and to the individual employee in terms of generalized directions as, "Observe what is going on in the shop," and "Use your head." Sermonettes of this kind can be preached for years and yet the employees will not improve in their observation or mental ability. If the employee should note certain activities in the shop, he should be told the specific points that he should observe.

[3] Hepner, Harry W.: "Good Teachers and the Sense of Humor," *School and Society*, Sept. 25, 1926, pp. 395, 396.

If he does not know his job, he should be told the specific facts that he ought to know. The facts to be learned or the skills to be acquired may have to be written on paper and given to the employee. Then the executive should ask the employee to explain what he has been told. This procedure may not be necessary in well-known situations, where directions are part of a regular routine; but specific directions are very helpful for new employees or in new situations for old employees. One reason why some employees seem to fail in carrying out the directions of their executives is that they are emotionally upset when in the presence of their superiors. Because of this emotional state, the employee is incapable of remembering what he was told to do. Directions which are quite clear to the executive are not so clear to the employee who has a different set of mental associations and behavior patterns. Written directions will eliminate many misunderstandings and enable the employee to know just exactly what he should do.

Executives are salesmen to their employees. Experienced salesmen soon learn that talking in generalities, such as "Service," "Wonderful value," and "Fine stuff," does not sell the goods so quickly as definite statements of the merits of the product in terms, such as "This large rivet, one-half inch in diameter, prevents chatter and keeps the frame rigid when you drive your car over rough country roads." People do not see what they look at. They see what is pointed out to them. Consequently, the points to be noted should be pointed out sufficiently slowly for the instructed employee to grasp and note them. If more than three points or items are mentioned by the executive, they should be listed on paper, because the memory span of the majority of employees is limited to three items.

Employees are similiar to the salesman's prospects with respect to the fact that objections are not always voiced. When a coal dealer made a study of the reasons why customers had stopped buying coal, he was surprised to find that many of them had had objections or complaints but

had said nothing about them. They simply went to another dealer for their coal. Similarly, the employee who disagrees with his superior or a policy of the company is apt to say nothing. Also, when an employee does not understand the instructions of his superior, he is likely to say nothing, because he hopes to get the right result by asking another employee or else he trusts to chance.

Some of the higher types of subordinates can be told the end-result and then allowed to go ahead and choose their own methods of attaining that end. However, modern business is becoming more and more complex, and, when duties are not properly performed, the executive should ask himself: "Did I explain what I wanted done so that the employee really knew what was wanted?"

6. *Employees prefer an executive who has a positive manner.*—The employee needs definite instructions, but he prefers them to be given in a manner that indicates self-confidence and knowledge on the part of the executive. If the executive hesitates and vacillates in his instructions, they will not be effective, and the accuracy of the result may be doubted. Enthusiasm in the boss engenders enthusiasm and confidence in the employee. Such self-confidence cannot be a form of bluffing, for the employees will soon discover that it is bluff. If the executive does not know the details of the employee's job, he should state that fact to the employee rather than attempt to hide his ignorance. The executive who never admits that he is wrong or that he does not know all about the minor details of an operation is likely to have difficulty in maintaining the confidence of his men. Of course, self-confidence on the part of the executive toward his employees does not mean that he must use profanity or swagger.

To engender confidence in the employee, argument should be avoided. Effective salesmanship may include a friendly give-and-take discussion, but it seldom develops into argument. The executive does not lead debates, nor compel his subordinates blindly to agree with him. Rather,

he is a teacher and a leader of men whom he admires and instructs.

The executive who has just cause for severely criticizing a subordinate tends to use the old-fashioned method of threatening to discharge the man, because the threat of discharge appears to be the strongest emotional force that can be used with an employee. However, the threat of discharge is not nearly so effective as some of the severe psychological methods that are used by executives who really have the art of handling men. These experts, in chastising men, use dramatic settings, such as calling the errant employee into the boss's office and having him sit in the executive's chair. Then the executive plays the part of the employee who is to be disciplined. He makes a full confession, wherein he presents all the facts in the offense and asks the acting chief to make a decision and recommend the justified punishment or discipline. Many of the men who occupy the boss's chair render a decision of discharge for themselves and the executive hires them back and tells them why they deserve further opportunities for improvement and how to avoid such offenses in the future.

Another executive has a full-length mirror in his office. When an employee is in need of criticism, he asks the employee to stand before the mirror and describe his behavior, or, in some cases, he describes it for the offender as he looks at his reflection. Most men find it very difficult to look into a mirror at their reflections and offer excuses for their conduct, unless the executive has misjudged them and they really are justified in stating their side of the story. In this way the offending individual learns that he is his own most valuable critic. Of course, such dramatic methods of criticism depend upon the ability of the executive to handle employees; not according to the rules learned from a book, but as the result of years of experience in dealing with and developing men. When skillfully used, these methods are far more effective than the customary threats of discharge, which are the mark of the weak executive. Any executive

can discharge his subordinates, but only the able can build strong employees out of weak or inexperienced men. Sound criticism must be constructive rather than a mere recital of deficiencies, and the offender should leave the executive's office with a conviction that the boss is right and fair and that he himself will do better.

Employees who must be discharged.—In spite of the best available methods of hiring, training courses, and the personal attention of supervisory executives, some employees must be discharged. However, a discharge is really an admission that the employee should not have been hired in the first place, or that the responsible executives were incapable of developing the employee. Being fired is a terrific psychological experience for most men and it often leaves a wound in the personality of the employee that years of satisfactory work do not heal. The executive who knows that some of his former employees have the right to say of him, "That man broke my spirit so that I have never been the same again," has less ability than he who can say, "Every man whom I kicked out fell forward and I honestly tried to help each to find himself."

It is probable that the great majority of men who have to be discharged from any department of business were never given adequate training. The fact that the new employee was given the personal attention of his superior for one hour every week, or that he worked with an experienced man, does not mean that the employee was trained. Rather, such haphazard methods of training are merely little talks that start nowhere and end in the same place. Systematic courses of training require months of effort to develop and experts to administer. Such training courses have been found especially valuable in the training of office workers, foremen, and salesmen. Many reports of business training methods have been published, and executives seem to agree that systematic training is an aid in the reduction of labor turnover. The Toledo Scale Company found that the turnover among systematically trained salesmen was less than

one third of that among similar salesmen who were poorly trained. Unfortunately, little or no objective data are now available which measure the effectiveness of various methods of training or compare the values of training by individual and group methods.

One executive who dislikes to discharge any person finds that he must do so in a few cases. Neither time nor ability

Fig. 32—The value of systematic employee training is illustrated in the statement of Mr. H. C. Whitehorne, Director of Education of the Toledo Scale Company, "Men trained in our Clearing House School increased their earnings 50 per cent over untrained men in the business. The greatest value, however, lies in the reduction of turnover, which has been very gratifying. According to records that we have on hand, the average turnover of the twenty-five leading specialty concerns in the United States is 85 per cent. This figure is obtained by dividing the number of men canceled during the year by the average sales force during the year. Our percentage of turnover of trained men was less than 25 per cent for the year 1928, which is less than one-third of the average of the organization."

admits of his developing some of the persons whom his company hires. To avoid actual discharge, he often assists the unsuccessful employees in getting jobs with other concerns where he honestly believes that they will fit; he also has his secretary clip advertisements for "Help Wanted" from trade journals and newspapers and mail them to the weakest men on the force. Sometimes these advertisements are sent from another city in a plain envelope so that the em-

ployee believes that another concern is anxious to take him away from his present employer.

The individual executive's contribution to morale.—The morale of employees of any executive is partially determined by the policies of the company toward the employees in general. The group forms of treatment, as welfare work, profit-sharing, vacations with pay, wage rates, etc., are a vital part in the morale of the employees. However, the individual executive has within his own power some important means of building or lowering the morale of his own employees. If the executive is psychoneurotic and swaggers, discharges without just cause, insists upon truculent obeisance, or acts in other ways that indicate an abnormal personality, only the psychiatrist or chance can improve his methods. However, the normal executive can analyze his own contribution to the morale of his employees.

If he will compute the percentage of labor turnover for his own department and compare it with that of other departments and companies, he will obtain a rough measure of acute employee dissatisfaction. It is not unusual to find departments within the same company that have from three to ten times as much labor turnover as other departments. When such evidence is found, the causes may have a vital bearing upon morale. Apparently trivial incidents may have a significant bearing upon employee morale. If he finds that his employees assume a busy attitude as soon as he appears, it is probable that they wish to please him, but, at the same time, they fear him. Such spurts of industriousness may mean that his employees work for him rather than with him.

The manner in which the executive treats the individual employee is the main factor in establishing morale. If the individual foreman, department head, or other executive uses the best methods in hiring, discharging, training, and inspiring his men, the morale of his own department may be good, even though the company may add little or noth-

INTENTIONAL SECOND EXPOSURE

one third of that among similar salesmen who were poorly trained. Unfortunately, little or no objective data are now available which measure the effectiveness of various methods of training or compare the values of training by individual and group methods.

One executive who dislikes to discharge any person finds that he must do so in a few cases. Neither time nor ability

Fig. 32—The value of systematic employee training is illustrated in the statement of Mr. H. C. Whitehorne, Director of Education of the Toledo Scale Company, "Men trained in our Clearing House School increased their earnings 50 per cent over untrained men in the business. The greatest value, however, lies in the reduction of turnover, which has been very gratifying. According to records that we have on hand, the average turnover of the twenty-five leading specialty concerns in the United States is 85 per cent. This figure is obtained by dividing the number of men canceled during the year by the average sales force during the year. Our percentage of turnover of trained men was less than 25 per cent for the year 1928, which is less than one-third of the average of the organization."

admits of his developing some of the persons whom his company hires. To avoid actual discharge, he often assists the unsuccessful employees in getting jobs with other concerns where he honestly believes that they will fit; he also has his secretary clip advertisements for "Help Wanted" from trade journals and newspapers and mail them to the weakest men on the force. Sometimes these advertisements are sent from another city in a plain envelope so that the em-

ployee believes that another concern is anxious to take him away from his present employer.

The individual executive's contribution to morale.—The morale of employees of any executive is partially determined by the policies of the company toward the employees in general. The group forms of treatment, as welfare work, profit-sharing, vacations with pay, wage rates, etc., are a vital part in the morale of the employees. However, the individual executive has within his own power some important means of building or lowering the morale of his own employees. If the executive is psychoneurotic and swaggers, discharges without just cause, insists upon truculent obeisance, or acts in other ways that indicate an abnormal personality, only the psychiatrist or chance can improve his methods. However, the normal executive can analyze his own contribution to the morale of his employees.

If he will compute the percentage of labor turnover for his own department and compare it with that of other departments and companies, he will obtain a rough measure of acute employee dissatisfaction. It is not unusual to find departments within the same company that have from three to ten times as much labor turnover as other departments. When such evidence is found, the causes may have a vital bearing upon morale. Apparently trivial incidents may have a significant bearing upon employee morale. If he finds that his employees assume a busy attitude as soon as he appears, it is probable that they wish to please him, but, at the same time, they fear him. Such spurts of industriousness may mean that his employees work for him rather than with him.

The manner in which the executive treats the individual employee is the main factor in establishing morale. If the individual foreman, department head, or other executive uses the best methods in hiring, discharging, training, and inspiring his men, the morale of his own department may be good, even though the company may add little or noth-

ing in the form of group methods of developing team spirit. Such a man knows that, if he tries to show, in a boastful manner, how an employee should do a part of his work and then fails to do it as well as the employee, the employee will have less respect for his chief. The able executive also knows that he cannot have his men learn a certain method of work only to have it changed in a few days or hours to an entirely different method. When the executive changes his mind and vacillates between possible courses of action, the employees resent the wasted time and effort. They are apt to say: "If the boss didn't change his mind so often, and knew what he's about, we wouldn't waste the company's money and we could have a raise in pay."

The manner in which orders are given may cause an employee to want to do the job or to want to quit. Voice and tact have been discussed so much by other writers that they need only be mentioned here. Moreover, the instructions to do a piece of work can be given to an employee with emphasis on the difficulties or on the pleasant parts of the job. If an employee is told only the difficult aspects of a job, he may decide that either he is a martyr or his superior has a great deal of confidence in his ability. When difficulties are pointed out to the employee, he should be told that he is given the work because his chief believes in him. Quite often, it is better to say nothing about the difficulties of the task, but to give the impression that the unpleasant parts of the work are a natural part of the company's functions and need no special elaboration. Telling people how hard a job is does not, as a rule, make it easier for them.

Handling employees is not a science. It is an art. The great man who acquires the art does not know how he leads his men. He can give talks about his methods and describe them to the academic psychologist or the novice who is about to enter business; but he cannot impart to another that which is essentially a part of himself any more than the skillful artist can tell the bystander how to paint a great picture. However, if the bystander has latent talents, he

can learn much by studying the great artist's methods, and, in time, he himself may become a great artist.

The art of handling men cannot be acquired in a day, as illustrated by the experience of a certain college professor who decided that he wished to study labor psychology by working as a laborer. He obtained a job in a coal mine near Pittsburgh, Pennsylvania, where the only boarding place in the camp was a dirty shack so full of boarders that the professor had to accept a one-fourth share in a bed. The bed was occupied by two workers in the daytime, and two at night. It so happened that the professor's bed-fellow was a foreigner who was intoxicated most of the time. At the end of a week the professor decided that he had learned enough about labor psychology in that camp, and that he would go on to the next mine. When he prepared to leave, he paid his board to the landlady, but she was unable to give him the correct change. He then asked her to get the change while he finished packing his luggage. When he was ready to leave, he was unable to find the landlady, and he told her adult daughter about the matter, explaining the fact that her mother owed him a dollar. The daughter insisted that the mother did not owe him a dollar. The two argued the matter for some time when the professor, filled with the emotions generated by his new and unpleasant environment, decided that possibly he was using the wrong tactics. He thought that perhaps he ought to talk to these people in the same language and terms that they used to each other, and use some profanity to show his disdain for the world as these workers seemed to do. Accordingly, he said to the woman, "Well, if you don't want to give me the dollar, you can go to hell." When that remark was made, the woman was aroused to fighting passion with resentment and tried to seize the professor, who grabbed his bag and ran out of the house. As he turned to see what the "tigress" was doing, he was hit over the eye with a lump of coal. An excellent "shiner" adorned his face as he related the experience a few days later.

In analyzing this episode, we have several factors at work. The woman did not recognize the professor as an equal. She knew that he had more "learnin' " than she had and she resented his air of superiority. Nor did she recognize him as a leader, because he was not a genuine member of her group. When he spoke to her as she had been spoken to by members of her own group, her sense of self-worthwhileness was assaulted, and she reacted according to her primitive impulses. The executive who feels that he is really not close to his employees and that he must "come down off his throne" and get acquainted with them is apt to do as the professor did. He cannot expect himself to live in one stratum of society for years and then suddenly become a true workingman. He may do the very same things that the laborers do, but they will note differences that betray his spuriousness. If the executive thinks that he is unnatural in his contacts with workingmen, he had better plan to spend a year with them, do the same things they do, and lead the life they lead. That is what the above-mentioned professor finally did and he is now an international authority in this field. As most executives will not want to go to such extremes, they had better hire assistants who are natural leaders and associates of workingmen. Some of the most successful corporations have a diplomatic president and a forceful, driving general manager or superintendent. The dynamic factory superintendent may not be very tactful, but he may be able to supervise men successfully in a hard-boiled manner, because the men know that his manner is natural and not acquired from books or a brief contact with laborers.

Projects.

1. To prevent politics in business, some managers hire employees of all kinds of religious and racial affiliations. What "mixtures" of religions, races, sexes, etc., would you consider to be most desirable to prevent company politics?

2. Construct a rating scale for the use of an executive who wishes to have his employees rate him on his executive characteristics and ability. Keep the tone and purpose of the rating scale constructive rather than critical in nature.

3. Tell how you would deal with the following kinds of employees who are in need of executive attention:

a. The employee who asks for a raise in pay but does not deserve it.

b. The employee who thoughtlessly gives a company secret to a competitor.

c. The rank-and-file employee who masquerades as an important executive of the company.

d. The salaried employee who was absent because of intoxication.

e. The employee who pads his overtime card.

4. What rules should the supervisory executive follow, in order to be certain that his instructions to an employee are thoroughly understood by the employee?

5. What should be done by the executive who happens to appear unexpectedly among a group of workers on a day-wage basis of pay and finds that most of them are loafing on the job?

6. Assume that you are the sales manager of a specialty manufacturer. One of your salesmen returns from an unsuccessful trip over his territory. The salesman is discouraged and believes that people are not buying anything now because times are bad. How would you convince the salesman that some people are buying? One sales manager takes such discouraged men to a busy street corner and shows them that hundreds of high-priced cars, furs, and luxuries have been and are being purchased. Another manager shows the pessimistic salesman what other salesmen of the company are doing. Suggest additional methods of removing pessimism and injecting energy into discouraged salesmen.

CHAPTER XIV

Psychology Applied to Salesmanship

When we hear the old argument as to whether salesmen can be made or must be born, we answer it by using the analogy of the artist. Some persons seem to be incapable of acquiring the artistic sense. Others have a good artistic capacity and learn easily; but even these must practice art. They never become great artists without some training. In like manner, a person who is born with sales capacity seldom becomes a great salesman without some analysis or counsel.

Many men claim that they cannot sell. Such a conviction is often unjustified. The reason they think they cannot sell is because they have been *conditioned* against salesmanship. That simply means that, when they were children, they heard mother scold the "bothersome peddlers" who thrust their feet into the doorway and sold her articles she did not want; or they heard father object to another installment payment on the piano; or, when they became older and associated with the girls, one girl might make a remark regarding an acquaintance such as, "Oh, he's *only* a salesman. I think Horace is doing much better; Horace works in a bank, you know." Of course, the man who has been conditioned in such a manner thinks that he cannot sell, or at least he does not want to sell, and consequently is a poor candidate for any sales organization. He may, however, drift into selling when he cannot find anything else to do, as happens to many of our college graduates who are untrained for any vocation and find it difficult to make a living in a so-called "respectable" job. These men who drift into selling because they cannot do

anything else must be *reconditioned* or *unconditioned* before they can become successful quota makers.

How can a man be conditioned for sales work?

1. By intellectual conviction.
2. By emotional experience.

An intelligent recognition of the importance of salesmanship may be brought about by an analysis of its value to people in general. Would society be better off with or without salesmen who annoy us and take our money away from us? The economist knows that salesmanship has been of immeasurable value in raising the standard of living and the magnificence of our civilization. Were it not for sales efforts of the past, few of our modern conveniences would now be among the necessities of life. Without salesmanship some of us might still be living in holes in the ground, or in rude cabins, and eating roots and dried meats. Through salesmanship we find it worth while to change raw materials into the luxuries of modern life.

Let us assume that a scientist, after spending several years in experimenting on methods of child training, discovers a scheme of training which would give society a better generation. Which would be the better for society—to write an article or a book about it and get a fee or a royalty for the manuscript, or to put it into an attractive form and commercialize the system? Let us estimate the results to both author and society. If he were to write a complete description of it and sell it to a popular ten-cent magazine which has the maximum of circulation among the mothers of to-day, the author's compensation might be two thousand dollars. Two million mothers would then have access to the scheme. Perhaps 500,000 mothers might read the article. If very successful, 1 per cent, or 5,000 mothers, would apply the system and the children would be benefited by it.

Now let us suppose that the system were commercialized and a charge of ten dollars made for it. In the course of ten

years, 200,000 copies of the scheme might be sold. Of these sold at the higher price, a far larger percentage of mothers would apply the system and more children would be benefited by it. We shall set this estimate at 25 per cent or 50,000. Certainly, society would be improved far more by a commercialization of the better system than if it were presented through noncommercial channels. This example is a hypothetical one, but it illustrates the fact that business is the great servant and helpmeet of society rather than its parasite. Hence, the salesman, as the agent of the business enterpriser, is just as valuable to society as the preacher or the banker. Experience indicates that if 1,000 units can be sold at a price of one dollar without salesmanship, it is often possible to sell 10,000 units with salesmanship at a price of fifty cents. More people can have the article, more people will have work to do, and more people will have money to spend when salesmanship is applied to any useful article. Once a man grasps the economic importance of salesmanship, he may find it possible to lose his childhood prejudices against selling and become convinced of the respectability of the salesman's vocation.

However, a man cannot become a successful salesman just because he knows that salesmen are a necessary part of our economic system and modern civilization. Salesmanship must have a halo around it. If he sees some one selling poultry food to farmers, the job will not have any emotional approval; but if he recognizes the poultry food salesman as a man who shows farmers' wives how to get the hens to produce so that those wives may have better clothing, better health, better children, and better educated sons and daughters, then the job of selling poultry food will be just as socially valuable as the work of the nurse, the teacher, or the physician. The job of selling poultry food then becomes a vocation of the highest community welfare.

Placing a halo around the job of selling is not so effective in giving salesmanship an emotional tone as an overwhelming experience of an emotion-gripping type. One of the

best salesmen in the country was unable to sell very many safety electric switch boxes until he had had such an overwhelming emotional experience. One day he called at a factory and tried to sell the manager some of his protective devices, and as usual failed to make the sale. On the way out of this factory he saw a worker pull an unprotected switch. The worker made a mistake, the current passed through his body, and the workman, a father with a wife and six children, suffered an early death just because the thing the salesman failed to sell had not been in use in that factory. Whenever the salesman called on a prospect after that, he could talk to the prospect with an evangelistic zeal that aroused the coldest prospects.

The salesman's conquest of fear.—More salesmen have been destroyed by fear than by war. Fear has lost more sales than the sales managers have stimulated through sales strategies. How can the salesman overcome his fear of the prospect?

In Chapter II we recapitulated the history of the race. Human beings developed as the result of millions of years of evolution. In that process of development, only those survived who were suspicious of the stranger. Hence, we, as a race, are also more or less instinctively suspicious of the stranger. The salesman who realizes this and says to himself: "Just because my primitive ancestors had to be afraid of strangers does not mean that I, too, have to be a fearful savage. Twentieth-century life permits me to greet every stranger as an honest equal. If I but knew him as he is, I would most probably find him to be a good friend. I'll find out right now."

The salesman can remove his fear of greeting the prospect by having some correspondence previous to the call. If he writes the prospect a letter of announcement of his visit, he will not hope that the prospect will be out when he calls. Sending each prospect a copy of the company's latest advertisement or a description of an attractive part of the company's special service will enable the salesman to feel

that the ice has been broken. He is obligated to call and can do so more easily.

Sometimes the salesman fears the prospect's objections. The salesman may be handling a line which is considered high priced. In such a case the salesman ought to convince himself that the line is worth the price or else quit his job and sell the cheaper line of goods. Usually, the salesman knows that his fear of objections is unfounded, and, when objections are a bar to aggressive selling, the salesman should enter the prospect's office and anticipate the objection of the prospect by saying: "Mr. Prospect, I called on you to find out whether you could handle a high-priced line such as ours. Only a few dealers in a town are able to sell a quality article of this kind." The prospect usually feels that his ability as a merchant is challenged and shows interest. Or the objection to a high-priced speciality may be anticipated by saying: "Mrs. Prospect, we are selling the best refrigerator, and it is the highest-priced machine on the market, but our customers are proud of it. If I could show you that the machine is worth all that it costs and more, would you be willing to consider a refrigerator of such quality?"

Fear of the prospect can also be removed by having made a study of the prospect's need for the commodity the salesman sells. If the salesman is really convinced that the article is needed, and that the thing he has to sell will render a worth-while service; it should be easy to call on the prospect and tell him why he needs it. This procedure, of course, implies that the salesman has made a study of the prospect's situation and problems.

Formulas for selling.—Most of the formulas for selling deal with mental states.[1] E. St. Elmo Lewis, in 1898, formulated the slogan, "Attract attention, maintain interest, create desire." Later he added a fourth term, "get action." Numerous additions and substitutions have been made to the above theory of selling, such as "gain confidence," "establish conviction," and "give satisfaction."

[1] Strong, Edward K., Jr.: "Theories of Selling," *The Journal of Applied Psychology*, vol. 9, No. 1, March, 1925, pp. 75-86. This article gives an excellent summary of various theories of selling.

Strong [2] has formulated a theory of selling in terms of "Want, solution, action, and satisfaction." This formula, like its predecessors, also deals largely with mental states; it directs the attention and efforts toward what goes on in the prospect's mind. Some sales managers who have trained salesmen claim that it is very difficult and decidedly confusing for a salesman to focus attention upon what the prospect is thinking. An easier and more effective method is to train the salesman to think of what he himself does rather than what may be happening in the mind of his prospect. The mental states of the prospect cannot be ignored, but *the emphasis should be upon what the salesman does and the objective factors of the selling act.* The salesman should think in terms of:

1. *The prospect as an individual*—his education, health, business affiliations, et cetera.
2. *The situation of the prospect*—his problems, financial status, and other objective characteristics relevant to the purchase of the salesman's product.
3. *The methods or acts in the sales canvass*—the time of day he calls, the methods of demonstrating, the words he speaks, the number of calls, the method of closing the sales talk, and other controllable acts on the part of the salesman.

To some salesmen, psychology has meant a mysterious trickery that could be acquired in the same manner as the art of the hypnotist. The modern psychologist is deeply interested in the methods of studying human behavior. The main difference between the salesman and the academic psychologist is the fact that the latter usually employs more exact methods of studying the predicting and influencing of

[2] Strong, Edward K., Jr.: "Psychology of Selling and Advertising," Chapter XXII. McGraw-Hill Book Co., 1925.

human behavior. The factors studied are the same. Only the methods used and the scope of study differ. The modern psychologist does not ask: "What happened in the prospect's mind?" But rather, "What did the prospect *do* in a given situation?" The "situation" would mean the acts of the salesman and the conditions affecting the prospect during the sales talk.

Directing the sales talk toward the prospect's problem. —The dominant attitude of the true salesman is that of the man who wishes to render service. Many men do not want to sell a prospect unless that prospect really needs the article under consideration. Some concerns are even changing the title of salesman to "serviceman," or, in the case of those who sell to dealers, "merchandise counselors." This attitude toward the prospect is expressed in the frequent mention of the "You viewpoint," "Prospect analysis," or the "Objective attitude." Selling has become a matter of "combing" the prospect's situation and then capitalizing that part of the situation which can be made more satisfying.

One salesman for a large paint manufacturer found it difficult to sell the first dealer he called upon in a certain city because of a pronounced business depression. To the next dealer he called upon in that city, he presented the suggestion, "Now is the ideal time to advertise and push paint. Men here are temporarily out of work and they can utilize their spare time to good advantage by painting at home and for others." The argument was accepted by the dealers. They advertised paint, and manufacturers, dealers, and the community benefited, because a salesman was able to capitalize the situation.

The best salesmen study the prospect, capitalize the immediate situation, and then arouse in the mind of the prospect a feeling of want. The prospect must be made to feel that his present situation could be better or more profitable. A man may wear the same suit for a year, but he may not have any sense of want for a new suit until his wife mentions his shabbiness so often that he wants a new suit. The

need may be present; but, until that need is transformed into a *want*, it might as well not exist so far as the salesman is concerned. The salesman must induce in the prospect a feeling of inadequacy, a *felt-need*. This feeling of a need or a conscious want takes place as soon as the salesman demonstrates his article in such a way that it fits into the prospect's problems. The suggested purchase becomes an answer or a solution to a want. In a few cases the salesman finds it an easy matter to fit his product or service into the wants of the prospect, as in the case of the fire insurance salesman who finds that his prospects want fire insurance right after a big fire in the community. At such times, they have a felt-need or a conscious want. However, it is usually necessary for the salesman to arouse the want or to connect his product with some present want.

The salesman who sells books for school children does not create a new want on the part of the mother, but he associates his books with the "want" for her child's success. The automobile salesman does not create new wants, but associates the new big car with the prospect's present want of social prestige. He shows the prospect how he can have his want satisfied *now*. The skillful salesman is an adept in the art of making latent or dormant wants dynamic and presenting means to *immediate* satisfaction. In terms of neural pathways, he arouses present pathways and associates his product with strong old pathways.

To do this, the salesman does not emphasize the product itself, but describes the product as an *end*. The product is not even the means to the desired end. It is rather a vivid description of the prospect who is pictured as enjoying those delights which the product gives. The automobile salesman does not say: "When you have this car, it will give your wife a lot of pleasure," but, "When you have this big car, your wife and your friends will realize that it is worthy of a man of your caliber." It is for this reason that the inventor of a machine is often incapable of selling it. The technical expert knows so much about it that he describes the

machine. The salesman describes not only the things that the machine does, but also the satisfactions and pleasures that it gives. He describes not only the means to the end, but the end in its most pleasant aspects. The dealer is given attractive descriptions of the profits to be made from

Fig. 33—"How would you approach a farmer and ask for a drink of water? Would you run in, strike an attitude, and demand a glass of water?"—From B. J. Williams, "The Hocus-Pocus about the Sales Approach," *Sales Management*, April 14, 1928, p. 581.

the handling of the product rather than a description of the product itself.

Some salesmen who sell to dealers think that they are giving the dealer service when they arrange his stock for him, sweep the store, wait on customers, or wash the windows. These acts are not really rendering a service that is based on the goods the salesman sells. Such assistance is

merely a method of approach to put the dealer in a receptive state regarding the salesman's commodities. The approach may be made from any one of several angles.

The approach.—Tricky approaches are popular with a few salesmen. They refuse to discuss their proposition with any one except the "big boss," because they are calling on a "personal matter." The "personal matter" approach is an exceedingly weak and stereotyped start for an interview. It is a deceitful method of getting into an office, because any official can be made to leave a meeting of his board of directors if his secretary tells him that a man wants to see him about the "accident" his son just had.

The dramatic approach which was used by an insurance salesman demanded the prospects' attention, even though it may have irritated some of them. His method was to come into a prospect's office, stand in front of his desk, and say not a word for a full minute, but gaze steadily into the eyes of the prospect until he became embarrassed or angry, and then bring his fist down on the prospect's desk with a thunderous bang, and say: "I came in here, Mr. Man, to sell you some life insurance." The usual answer to the salesman was, "Is that so?" But the salesman stood his ground and plunged into an immediate attack. The method of approach was unique, but the salesman had an excellent record. (Perhaps his sales were good in spite of his approach rather than because of it.)

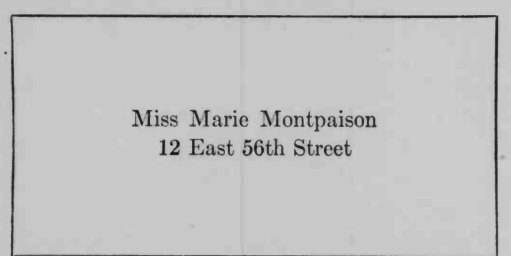
Another form of the dramatic approach is that of the salesman who calls on a small buyer and opens his conversation by saying: "Mr. Prospect, I came in here to-day to sell you a trainload of machines." This at least jolts the prospect into attention.

The house-to-house canvassers occasionally show some ingenuity in their approaches. Who has not opened the door to find a young man who says: "I came to ask you to vote for me." When asked about the particular office for which he seems to be running, this stripling launches into a sales talk regarding a magazine that he is selling.

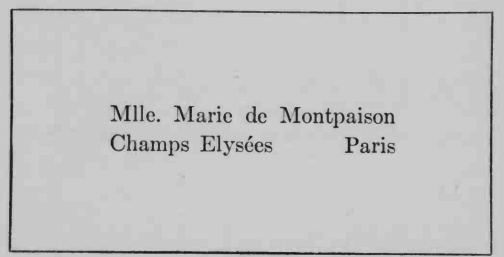
One firm whose canvassers found it difficult to gain admission to the homes of wealthy women, instructed them to wear spats and carry a cane and light-colored kid gloves. The maids and butlers then assumed that the canvasser was making a social call and readily admitted him. Another woman who sold books hired a big car and a liveried chauffeur. Thereafter she had no difficulty in gaining admission to the homes of the well-to-do. Of course, simpler schemes are used, such as leaving a certificate for a small gift one day and presenting the gift the next day. This has been worked successfully, but it is of doubtful value in the long run, unless the companies promoting it can train their salesmen to use it skillfully.

Britton Ashbrook [3] described how one saleswoman gained admittance to the homes of the New York moneyed class:

> Mlle. Marie de Montpaison brought from Europe a remarkable collection of batiks, Belgian laces, Spanish mantillas, and Czech hand embroidery. These she thought to sell in person to the society of the great and rich New York City.
>
> "When in Rome do as the Romans do" was naturally translated into "When in America do as the Americans do." Her new cards read:



> How inhospitable a race the Americans seemed! Almost none of "les elegantes" would see her. Butlers were even haughtier than the stage depicts them. Gloom prevailed. Failure dogged her footsteps.
>
> Then she met her benefactor, a kindly social leader with a sense of humor. Mrs. "Y" knew the fads and foibles of her own class. She wrote Miss Montpaison's prescription for success. It read: "Be French! Get a new calling card—a French calling card."
>
> The new card read:

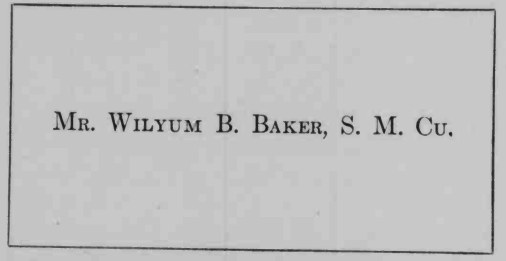


> Butlers began to beam. Great ladies sent mademoiselle to great ladies. She became a cult. When last seen she had secured financial backing and was about to open a shop in one of the best side streets just off the Avenue.

[3] Ashbrook, Britton: "Opening the Door of the Hard-to-see Prospect," *Printers' Ink Weekly*, June 2, 1921, p. 36.

Many of the better salesmen do not use cards at all. The standard card, which states the firm name, the address, and the name of the representative, is far too trite to be effective. If deemed necessary to use a card, the firm and the salesman should show some originality by using a card of distinctive color, shape, or information. In most cases, a card should not be used, and, when the secretary of a buyer insists upon a card, the salesman should write an interesting bit of news or information on a scratch pad for the secretary to hand to the buyer. Such notes may be similar to the information given in advance letters which are sent to prospects. Example: "When the Booneville Emporium placed two of our Beautybilt washers on the floor they sold ten machines during the first week and made a profit of $473.87. May I explain the interesting plan they used?" The item of profit or saving made by a firm mentioned in the note should be one regarding an out-of-town firm in a similar business, or of a firm that has great business prestige, such as Marshall Field & Company.

Even so simple a device as putting mysterious-looking initials after the name of the salesman will help to gain admittance:



When this specialty salesman was asked what the S. M. Cu. meant, he answered, " 'Saving money for customers' and that is what I want to talk to you about."

When the advance letter of announcement of the salesman's intended call is sent to the prospect, the letter should not attempt to sell the prospect. It should merely arouse his curiosity. The telephone is especially valuable in arranging convenient hours for the interview, but it is likely to be abused by the salesman who is too lazy to call. Every sales manager whose men use the telephone for appointments should check up on them to ascertain whether they are trying to do their selling by telephone. Order taking may be done by telephone, but not selling, except in a few exceptional cases.

When the salesman does not wish to use reprints of the company's advertising or an original card, he can make his approach through the use of unusually interesting photographs that show the value of his product or service, but have so much human interest that any one will enjoy seeing them. One life insurance salesman found it easy to talk to his prospects when he went to the county poorhouse and took pictures of twenty old men who once had had money but who did not keep up their life insurance payments. On the bottom of each card he typed a short human interest

story of each inmate. Similarly, any product or service will lend itself to some kind of human interest photography.

Sometimes an approach may be made through the arrangement of an introduction by some respected person in the community. One salesman of farm machinery obtained a letter of introduction from the local banker and then hired a retired farmer to accompany him on his calls among the farmers. His official introducer paved the way for his sales talk and made his sales efforts far more profitable than they would have been without the prepared introduction.

Salesmen often try to find out a prospect's hobby before they call. This kind of interest in a prospect's affairs is legitimate if the salesman does not attempt to bluff the prospect. The salesman's interest in the prospect's hobby should be that of a learner. He can have a genuine desire to learn something about the hobby, but if he exhibits an artificial interest merely to make a sale, he is likely to make himself ridiculous. The salesman's mention of the hobbies of the prospect should be of such a nature that the prospect will be pleased with himself because the salesman is willing to listen to his exploits. Sincerity is always important for the salesman, but it is especially important when hobbies are discussed. Salesmanship requires more than sympathy for the prospect. It requires *empathy*. *Sympathy* means that we feel with or for a person. *Empathy* means that the salesman has the emotional state of a person who is in the situation of the prospect. Care must be exercised lest the hobby-prospect consume so much time that the prospect rather than the salesman dominates the interview. As Abraham Lincoln said: [4]

> If you would win a man to your cause, first convince him that you are his true friend. Therein is a drop of honey which catches his heart, which, say what you will, is the greatest high road to his reason, and which, (sic) when once gained, you will find little trouble in convincing his judgment of the justness of your cause, if indeed that cause be really a just one. On the contrary,

[4] *Printers' Ink Weekly*, June 25, 1925, page 180.

assume to *dictate* to his judgment, or to command to his action, and he will retract within himself, close all avenues of approach to his head and his heart, and though your cause be naked truth itself transformed to the heaviest lance, harder than steel and sharper than steel can ever be made, and though you throw it with Herculean force and precision, you shall no more be able to pierce him than to penetrate the hard shell of a tortoise with a rye straw.

Some salesmen have a kind of "society-complex." They think that all prospects demand a certain amount of entertaining. One salesman for a wholesale millinery concern expressed it: "I've just gotten back from a lot of wild parties with the small-town buyers. These women buyers seem to think that the salesman who can entertain the most lavishly is also the man who has the lowest prices and the best goods."

Some sociable salesmen make themselves congenial to their buyers and entertain the buyers and their families. In turn, the buyer may invite the salesman to his home or club. Contacts of this sort often result disastrously for the salesman. The salesman tends to "lay it on too thick" regarding his exploits on the gay white way, with the result that the prospect's wife insists that her husband shall deal with some concern other than the one which is represented by the snappiest fellow on Broadway. Sincerity and a mutuality of tastes are essential, but even a pronounced bacchant may prefer to give his business to a reliable character rather than to a fellow-imbiber.

Intimate friendships and business often do not mix well, but to some extent friendly contacts in trade, fraternal, and community organizations are valuable. Other things being equal, we prefer to deal with the man whom we have met under pleasant circumstances and whom we admire for what he is doing for the industry, the community, or business in general. Strictly speaking, a salesman's time is not his own when five o'clock comes. He should spend a reasonable amount of time with his family, but his position

also demands that he continue his contacts with the men who give him business and the community which enables him to lead a happy life. A healthy interest in life, business, and his job enables the salesman to call at the office of any prospect with a clear head and a straightforward attitude that radiates confidence and sincerity.

A pronounced danger in sales approaches which depend upon social contacts is that, when the salesman knows his prospects too well, he is likely to classify his prospects as "ten-case buyers," "two-case buyers," et cetera, rather than make a businesslike analysis of the prospect's actual situation.

Finally, we should bear in mind that the approach does not necessitate hocus-pocus in the form of unnatural stagy or tricky stunts. If a prospect refuses to see the salesman who is sincere, the salesman can always arrange for an interview by letter, or he can call again and again until he convinces the prospect that he should give him a complete hearing.

The demonstration and sales talk.—When the salesman enters the presence of the prospect, he is apt to say: "I am Mr. So-and-so and I represent the Blank Company. I would like to show you one of our new grommets." This kind of an opening is stereotyped and bores the prospect unless he happens to be in a receptive mood.

Some of the best salesmen omit introductory remarks and plunge at once into the demonstration. The various types of demonstration may be classified as follows:

1. *Sample in the salesman's hand.*—In this common type of demonstration, the salesman shows the device to the prospect. The salesman shows what it does and how it operates. The prospect looks on and shows interest, asks questions, or gives evidence of boredom.

2. *Sample in the prospect's hand.*—Here the salesman hands the device immediately to the prospect. It is so placed that the prospect is compelled to touch, taste, smell,

hear, see, or manipulate the article. If the article is novel in appearance, the prospect may be anxious to observe or to try it. This method has been used with success in selling pianos and washing machines. The salesman delivers the article to the home, and the prospect accustoms herself to the use of it.

3. *This-is-what-you-are-losing method.*—In this type of sales demonstration the salesman attempts to show the prospect what a man in his position is actually losing in convenience or in dollars and cents. He takes out a pencil and a pad and asks the prospect just enough simple and generally known facts about his business to enable the salesman to compute the prospect's daily, monthly, or yearly loss. Some salesmen make the demonstration more dramatic by actually using a five-dollar-gold piece or a hundred-dollar bill to dramatize the loss. One salesman had a printer make some blank checks with the name of the bank as "The Bank of Lost Money." To the prospect he handed a check for the amount that was being lost annually through lack of use of his product.

4. *This device will enable you to do more or be more.*—The salesman does not dwell on the old situation or the present situation, but proceeds at once to the future situation—the prospect's. He shows how much more money the dealer can make if he stocks these goods.

5. *The comparison method.*—This method combines 3 and 4. The salesman does not give emphasis to the commodity itself, but rather shows the prospect his present situation and then shows him how much better this new or other device would be for his needs. This does not mean that the salesman should knock his competitor's product or give the prospect the impression that he must be a "boob" because he is not using his article. If tactfully done, even the correspondence school salesman can make the prospect feel, without embarrassment, that he could be using his evenings to better advantage and obtain more money and prestige if he were to change his present status. The

salesman should always be careful to avoid statements which might cause the prospect to feel that the salesman considers him unfortunate or ignorant just because they never happened to meet before.

6. *The moving picture and graphic chart methods.*—It is often difficult for the salesman to demonstrate the service or article with the service or article itself, so he must depend upon some graphic means to enable the prospect to

Fig. 34—The use of the portable moving picture machine is increasing in salesmanship. It is an effective method of demonstration.

realize his present situation and to visualize the best possible situation. In a survey of 178 firms that had sales films, 46 per cent of them had their salesmen use the films in their demonstrations to prospects. The film method of demonstration is one of the very best methods, because the prospect can really see the benefits claimed for the product instead of attempting to visualize them. The moving picture machine is a means of demonstration which should be

INTENTIONAL SECOND EXPOSURE

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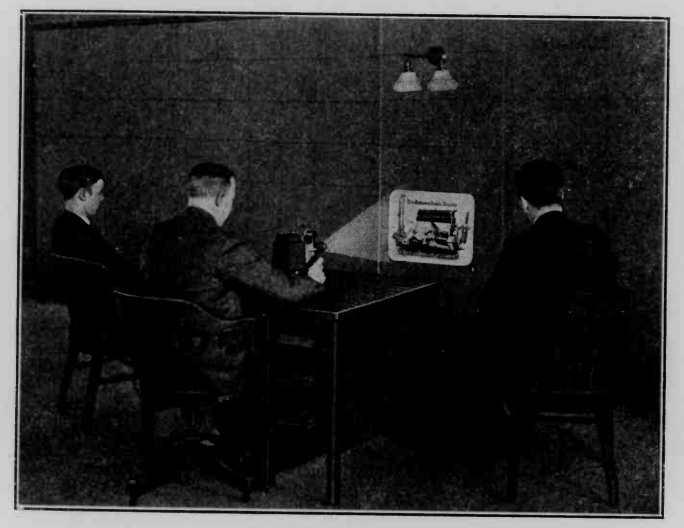

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used more frequently. The chief objection to most of the films seems to be that they deal with the manufacturer's problems rather than with the customer's problems.

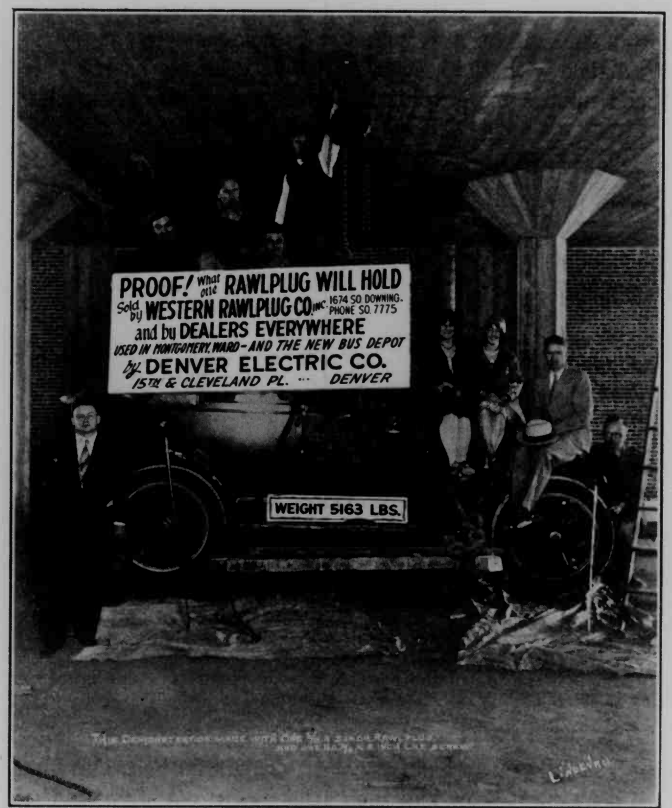


Fig. 35—The stunt method of demonstrating can be made relevant to the product's qualities.

7. *The stunt method.*—The stunt is the favorite form of demonstration to the beginner in selling. It has its place in the sales interview, but it often directs the prospect's attention to the stunt as a stunt rather than to the article as a solution of the prospect's problems. Any store can crowd the sidewalk with people by putting a stunt in the window, but the store management does not want everybody to stop. Only the worthwhile prospects should be attracted to the window. The circus side-show barker wants to attract everyone to his entertainment and the stunt is legitimate advertising for him; but the salesman should not depend upon a stunt to do his selling. The stunt may be made an attention-getter, but it should be relevant to one strong talking point. The salesmen of unbreakable vacuum bottles can approach a buyer by dropping a bottle on the floor. In most stunt demonstrations, however, the stunt distracts attention from the vital points at issue.

The sales talk.—The first rule of the successful sales talk is that it must deal with the prospect's situation and be directed toward a more satisfied, more contented, or more effective prospect-situation. The talk that starts nowhere and gets nowhere seldom leads to a sale. Even though a salesman dislikes the "canned" sales talk, he should have certain definite goals in each talk. Some of the objectives may be omitted with prospects who do not need certain points, but more sales have been lost through lack of a planned sales talk than because of having the talk too highly standardized.

If the sales talk is not planned and practiced in advance, the salesman tends to "run all over the lot" rather than "touch the bases." He may work himself into a frenzy, but his talk goes in circles. Words are plentiful. Ideas are uncoördinated. The result is likely to remind one of Mark Twain's experience with the minister who started to preach an eloquent sermon on missions. The description of the pathetic condition of the unfortunate heathen moved Twain to the extent that he took from his pocket a purse that contained every cent he had in the world. He wanted to give it to help the worthy cause. But the preacher had not planned his sales talk in advance and kept on talking.

Twain's ardor cooled gradually until he made up his mind that he would give only twenty-five dollars. The preacher talked on and on, and by and by Mark decided that ten dollars would be plenty. Finally, after more talk, the collection plates were passed and Mark, instead of *giving* the ten dollars, reached over and *took* a five-dollar bill from the plate!

One "quota-beating" salesman who sells a specialty tells his prospect that he has planned his sales talk so that he, the prospect, will be able to see clearly what his machine can do and that the prospect can judge for himself as to whether the machine will make money for him. Then he hands the prospect a small printed card, saying: "This card has listed on it the six most common questions which my prospects ask or want to ask while I demonstrate this machine. If I do not make myself clear on any one point, check that question. Of course, if you think of a point not on the card, be sure to ask that." A significant part of this scheme is the fact that the salesman has omitted from the card the most common question asked by the prospects and which every prospect is almost sure to ask. When the prospect raises that question, the salesman acts as though the prospect has thought of something no one ever before thought of. He scratches his head, then answers the point, and compliments the prospect's ingenuity; but at the same time the acceptance of that point practically commits the prospect to the purchase of the machine. The above method can be adapted to almost any product or service sold to-day.

A major fault of some salesmen is that of talking in abstract terms. They discuss *quality* in a general way. The word "quality" and similar terms should never be used. Quality should be described by actual concrete examples of what a user did with this machine under certain trying conditions. To say that this is the best hill-climbing car in the world is not nearly so effective as to describe an unusually steep hill which the prospect knows and then tell how six

out of seven owners of that make of car went up that hill on high in an impartial observation, when the best that any other make of car did at the same time was four out of seven. The salesmen of a paper company, selling paper towels, do not talk about superior absorbency. They take two inkwells having the same amount of ink in them and stick their own towel into one inkwell and a towel of another brand into the other inkwell. After a few minutes, the difference in their absorbent qualities can be seen by the prospect.

Advertisers long ago learned that readers do not read advertisements that are full of abstract ideas. They want pictures that illustrate a concrete and definite situation. For example: one advertiser of a five-dollar memory course brought the sales cost from $2.25 to $1 simply by adding a picture of a blindfolded man to the same headline, same copy, and in the same media. All abstractions such as *best*, *strongest*, *newest*, *value*, *service*, and *most economical* should be avoided and the talking point should be stated in terms of the concrete with actual instances of how that characteristic has been proved by other users.

More annoying than the talking of abstractions is the use of meaningless slangy expressions such as, "This is a world-beater," and, "I tell you what, you ain't never seen anything as good as this." Equally bad are the crudities: "Now listen to me," "You know what I mean," "And so on and so forth," and "D'ya get me?" The last two expressions seem to be very common in certain parts of the country and are used by people to cover embarrassment or to avoid thinking. Definite descriptive terms are far more effective than popular slang or meaningless verbiage.

The use of definite terms in the sales talk does not necessitate boresome technical descriptions of how the product is made, the kind of raw materials used, or the way it is sold. When technicalities are used they should be related to the prospect's problems. The reason for a detailed description of a gear in a machine should be stated to the prospect to con-

vince him that, while a specific part has been giving trouble in some machines of other makes, it cannot cause difficulties in this brand. The prospect wants definite facts that he can grasp. Statistical studies of returns from advertising show that the advertisements of a general nature, such as the firm or general brand, tend to increase the cost of inquiries. One firm had been advertising a definite article of the general line. Then they changed to advertising the general line without mention of a specific article. Inquiries jumped in cost from an average of twenty-five cents to more than two dollars each. In similar manner, it is better for the salesman to dwell upon one or two outstanding characteristics of his proposition than to try to explain all its good features.

The sales talk should be definite in its mental imagery, but it should also have human interest. Cold, intellectual appeals are not so stimulating to action as are the warmer emotions. The prospect wants to hear a story. He likes to have a lump in his throat and a tear in his eye. He wants to hear about people and things that make him smile, that cause him to love more devotedly, to sacrifice a little, and to dream new dreams. The prospect wants to take sides with what he believes to be right. It is necessary to invest the sales talk with an emotional tone. As the old banker said to a young salesman: "If you are trying to sell the services of a bank, show the prospect the pictures of your officers. Describe the little human interest aspects of their positions. Tell the story of how one of those officers helped a man to pull out of a bad situation and achieve business success. Do not talk the usual bank talk about the people in the bank."

Answering objections.—The true salesman hopes that the prospect will raise objections before he buys. The objection offers the salesman an opportunity to demonstrate his sales ability. One of the best salesmen in the country always has a pang of regret when the prospect indicates that he is sold and wants to sign on the dotted line. This

salesman enjoys selling: the meeting of minds, the fencing-like encounter, the parries, the thrusts, and the losing or gaining a new friend. He sells because he loves the game of selling.

Objections are a natural part of the game of selling. The prospect seldom welcomes the salesman with open arms. Can we blame the prospect? If we try to analyze the various ideas in the prospect's mind, we can understand why he does not, as a rule, want to see another salesman. The reason is that the salesman interrupts the prospect's *on-going-activity*. Even a newborn baby objects to having its activity thwarted or retarded. Hold a baby with his arms tight against his body and he will soon show his anger in no uncertain manner. When the salesman comes to see a prospect, he interrupts the flow of ideas and activities of the prospect. The worthwhile prospect is always busy doing something else, mentally or physically. The most natural response of the prospect to the salesman is that he does not need or does not want what the salesman has to offer. The salesman must, first of all, get the prospect into a new line of thought, and, if the salesman has planned his demonstration and sales talk in the right manner, the sale should follow as a matter of course. The live prospect will make some objections in order to clarify his ideas and to ascertain whether he really understands what the salesman has just told him.

Prospects who have many salesmen calling on them each day soon acquire the knack of getting rid of salesmen with a set of stock objections. They have their activities interrupted so often that they are always prepared, as a matter of habit, in the making of objections so that salesmen will be chased away with a minimum of interruption. Mr. A. H. Deute described an illustrative experience: [5]

Mr. Dunn is an old-time salesman and tells an interesting

[5] Deute, A. H.: "Turning the Dealer's Objection into a Sales Argument," *Printers' Ink Weekly*, April 7, 1921, pp. 113–114.

story of how he developed confidence and the ability to survive the dealer's objections.

He was on his first selling job. He was selling Babbitt's Cleanser, while the leading competitor was Pyle's Pearline. Maybe it was the other way around, but either way is all right, so far as the illustration goes.

For many weeks he had dealer after dealer tell him that Pyle's was the big seller. Man after man would stop him short with something like this:

"Yes, you're handling a good product. Personally, I am for it. You can see I handle it. But honestly, Babbitt's can't sell alongside of Pyle's. They really have the call so far as this market is concerned. I'm always glad to give you an order when I can possibly do it, but while I believe all you tell me about your quality, I'm only the servant of my customers and must give them what they want."

And so Dunn got almost to the point where he was convinced that he was on the wrong horse, that he was not representing the line that could be sold. Weren't the dealers all friendly? Didn't they admit they liked his line? He could do nothing more than that. They told him over and over that he got all the business they could give him. It must be that the other line simply had the consumer demand.

But before he fully made up his mind to try to get a job with the other line he decided to go into the thing further. He didn't want to admit that he was defeated. He didn't want to own up to the fact that, even if the other line had the apparent call, he as a salesman could not put his own product over. He made up his mind thoroughly to investigate both sides of these stories. It was that spirit of wanting to investigate and get to the bottom of things, instead of merely taking another person's word for it, that cleared the thing up and enabled him to go out and get the volume of business.

What he did was this: He set his sample down outside the next store. He went in and cheerfully sang out, "Pyle's Pearline," the competing line. With that he stopped short.

"Pyle's Pearline?" the dealer exclaimed. "Not a thing that I can do for you. I know you have a good product and I do sell some. But in this neighborhood Babbitt's has the call. I'm impartial and would just as soon buy from one as another, but I've got to buy what I can sell."

"Got plenty of Pearline on hand now?" Dunn asked.

"Plenty," replied the dealer. "In fact, all I will need for several weeks."

"How often do you have to order Babbitt's?" Dunn asked him.

"Pretty often," the dealer explained. "That's a wonderful seller. They're always trying to work up some sort of advertising idea to help us move the stock. It's too bad your house doesn't go in more for that sort of thing."

"Get me straight on this," Dunn replied. "I'm selling Babbitt's."

"You told me you were selling Pearline," the dealer replied in some heat.

"No, I did not," Dunn corrected him. "I came in here and sang out 'Pyle's Pearline,' and before I said another word you began to tell me what a hard time you had selling it and how much better you did with Babbitt's. So I'm ready to take your order and I'm surely glad the goods are moving so well."

Dunn says he didn't get any order from this particular dealer. In fact, it took some time and a lot of hard talking to placate that individual, but the experience was worth more to him than he could have obtained from selling a whole carload. He learned a valuable lesson and he got confidence. From then on he no longer let himself be forced out of the store by the "No demand" objection. He had developed that confidence, founded upon experience, which enables the salesman to sell goods instead of take a refusal politely.

When the prospect says: "I am not interested," the salesman can say: "I know that you are not interested, Mr. Prospect. That's why I called. You have never used this device and Mr. Blake of the Samson Company thought I ought to show it to you." The salesman who can smile and accept the objection with nonchalance will be able to go ahead with the demonstration.

When an apparently unanswerable objection is stated, the salesman should analyze it for its validity. One manager of a large restaurant refused to do any systematic advertising, because he said that he had done some advertising and it did not pay. He was willing to do some good-will advertising in charity programs merely as a philanthropic act, but he would never try any more advertising campaigns. Salesman after salesman was turned down in this

manner until a new salesman happened to ask him to describe the kind of advertising he had done. The proprietor of the restaurant then described his two unsuccessful campaigns. One "campaign" consisted of asking his regular customers to write their names and addresses on a slip of paper. When he had collected the names of his customers, he then drew a name from a hat and gave to the lucky person the privilege of eating five dollars' worth of food for nothing. He said that he had done that each week for several weeks and it had not increased his business at all. His second campaign was equally haphazard. He ran a one-inch advertisement every other day for a year in the daily newspaper. This advertisement was on the "Business Page," where it was buried among seventy other advertisements of similar type. Of course, his advertising had not paid him. No experienced advertising man would expect it to pay. As in this example, many objections are not barriers to a sale when the objections are analyzed.

If the salesman continues to call in spite of objections, he usually learns how to conquer the barriers to the sale. If he continues to call and cannot make a sale, he should try to find out the real reason for it. He may find that the brother of his prospect is in the same business as the salesman and that it is hopeless for a stranger to try to sell the prospect, or he may find that the prospect buys his supplies of the kind that the salesman handles from an old friend who knows that the way to sell this dealer is to take him to a German hotel for a dinner of sauerkraut and chat with him over several pipes of tobacco. If the salesman wishes to get the business he must go after it in the same way that his competitor does or else use other tactics that are stronger.

In some cases the objections can be anticipated by capitalizing the situation. When salesmen for jobbers call on dealers during a rainy period, it is well to begin the interview by commenting on the fact that the farmers wanted rain and that they are getting it just in time for business.

The objections of most dealers to buying because conditions are bad can be answered with definite, prepared figures to show the dealer that business will continue regardless of depressions. Certain professional and other people who are not affected by conditions are always buying. The bank clearings of the city may show that they are greater than last year in that town. Ask the dealer to look out on the street and see the cars that are going up and down. People are still wearing clothes and eating. Figures show that there is only about 10 per cent more general merchandise consumed in peak business periods than in normal periods. If the merchant is active he should have need of almost as much stock in a depression as in a boom period. The hard times give him an opportunity to demonstrate his superior merchandising ability.

To answer objections, the salesman should be able to show facts and figures that have been collected by a disinterested person. If the buyer does not believe that the salesman's shirts do not fade, the salesman should show the results of tests conducted under conditions that will satisfy the prospect. The shirt that went through the tests should be handed to the prospect for inspection. The salesman often depends upon his wits and bullying to answer objections, when the objections could be answered far more easily by just a tested sample, a page of charts, or a testimonial letter.

"The price is too high" is one of the arguments which should be answered in a straightforward manner rather than by evasion or humor. If the price objection is evaded, the customer may not mention it again but may refuse to buy. After all, the customer should know why the price asked is fair. A direct answer to the price objection is the dramatized form of answer. A salesman of a washing machine capitalizes the high price of his machine by demonstrating the machine with money in his hand. Every time he points out a strong feature of his machine, he places a dollar bill or a quarter on that part of the machine. When

he gets through he adds up the amount of money and shows the prospect that the price asked is fair in comparison to the value.

If the prospect has been sold during the sales talk, neither price nor any other objection will prevent the sale. The prospect may raise the question of price, but he may do it because he really desires to have ample justification for the price. The salesman who is unduly price-conscious has never been convinced that the product is worth the price asked. If his standard of living has been on a scale below that of the price level of the article he is selling, it will be necessary for the sales manager to reëducate the salesman. Some salesmen habitually present the price objection as the excuse for low records. Other salesmen of the same company never seem to meet the price difficulty. If the product is rightly marketed, the price should be only an incidental objection and the easiest of all objections to answer.

When the prospect wishes to have a handy excuse for not buying, he objects to the price. There is but one other excuse which is more common and that is, *"I'll see you next time."* If the dealer presents this excuse, it simply means that the salesman has not done a good job of convincing the prospect that he can make money with the line. The salesman can answer: "Of course, I'll see you next time, but that will not be for three months. In the meantime, according to my quota, 4,600 people are going to buy this article in this county. They will pay the dealers who sell them a gross profit of $2,300. You will want to be one of the dealers to have your share in the profits."

The salesman should not have the impression that it is well to "annihilate" the prospect when he makes an objection. To knock the prospect's objection too hard causes him to lose his self-respect. When an objection is stated, the salesman should restate the objection briefly and fairly; then the prospect knows that his objection is appreciated. Pay the prospect a compliment when he raises a thread-

bare objection—act as if it were an unheard-of objection and answer it—not too quickly but satisfactorily to the prospect's sense of worthwhileness.

The answering of objections should never degenerate into an argument. The salesman may be able to win the argument; but, if he does, he loses his sale. As soon as the discussion between salesman and prospect tends toward the argumentative type, the salesman should use humor. In fact, since most salesmen do not take the trouble to prepare evidence that will meet objections, they should at least collect a set of anecdotes that will answer the most frequent objections.

The art of getting the order on the order book.—The psychological moment to close has received much attention in sales discussions. As a matter of fact, there are few true psychological moments when the prospect wishes to order and the salesman catches the prospect off his guard for the order. Orders that must be "caught on the fly" are often countermanded. The salesman should not pounce upon the prospect for the order. If the salesman has studied the needs of the prospect and is anxious to render a real service, the order will follow of its own accord.

It is true, however, that some prospects find it difficult to make a decision and the salesman must help them to decide. This does not mean that the salesman must use trickery, but that, if he carries the sales canvass to its logical conclusion, he will get the order.

A few salesmen claim that they can recognize the moment when the prospect wishes to buy. They note whether the prospect leans forward, toward the salesman, and toys with the sample. One salesman even claimed that a prospect once told him that he did not want the article under discussion but the salesman said: "Your lips tell me that you do not want the article and yet your body tells me that you do, because you leaned toward me when you said that you could not buy it now." The prospect admitted that he wanted the article, but that he had an inhibiting

objection which he hesitated to mention. When the objection was stated and answered, the prospect bought. In the best sales canvasses, the salesman and the prospect get into the same mood or attitude, into a mental state of mutuality of interest, so that the salesman does not view the prospect as a mere plaything but as a fellow business man whose interests are complementary to his own.

It is easier for the prospect to make a decision if the salesman has been enthusiastic in his presentation. An excited prospect is aroused and feels that he must act. Salesmanship is not a coldly logical activity, but an emotional activity. We do few momentous things just because we know that we should do them, but rather because we *feel* that we *want* to do them. The enthusiastic salesman engenders enthusiasm and the order is given, because it is the most natural thing for the prospect to do at the time.

The prospect may be assisted in making a decision by arranging the situation so that he need decide only a minor point. The experienced life insurance salesman does not, as a rule, ask the prospect whether he does or does not want his policy. Rather, he asks him: "Will it be convenient for you to have our medical examiner call at your home on Tuesday evening and give you the health examination?" If the prospect indicates that that time is satisfactory he has also indicated incidentally that he will take the insurance. The jobber salesman often does the same when he asks about the method of shipment or the date of delivery, the salesman naming a plan that he knows will be satisfactory to the customer.

Some salesmen apply this "minor-decision" method too frequently, when they get into the habit of asking for a trial order. The trial order of a half-dozen lot is easily asked for and easily given. But a trial order simply means that the sale was not completed. It is a sorry substitute for the real sale and should not be asked for except in rare cases. The customer has not been sold when he gives a trial order. He still has many mental reservations or he

would give a worthwhile order. The trial order means that the dealer will not push the new line nearly so hard as he would if he had really committed himself to a reasonable but complete supply. An inadequate stock means that the clerks in the store will show customers the old line when they are asked for that kind of product. When the trial order is offered, the salesman should ignore it and try to sell the dealer an adequate supply. If he cannot do so, he might seriously consider refusing to accept the order, because the cost of carrying a small account at the home office is, in some cases, greater than the profits derived from the small sales. Of course, the trial order may be used as a starting point and the amount can be stepped up to a figure where it is profitable to supply the dealer.

The prospect will find it easier to buy if the salesman has succeeded in getting him to say "Yes" several times during the interview. Some salesmen acquire the art of inducing their prospects to agree with them on points which are only slightly or indirectly related to the order. The prospect who is in a hostile or negative attitude is hard to persuade, whereas the agreeing prospect is in a mood for further action. The unskillful salesman who tries to have his prospects "Yes" themselves into an order is likely to lose his grip on the situation. This method can be used only by those who are unusually adept at controlling the sales situation. The "Yes" method of closing the sale may be too difficult to control, but the salesman can concentrate on the one point which appeared to appeal most to the prospect. Automobile salesmen know that the points about a car that appeal to those who know cars are not the points that appeal to prospects. The car salesmen tend to be interested in the mechanical qualities of the car, whereas the majority of prospects are interested in the accessories, such as the cigar lighter and the vanity case. The real estate salesmen know that building construction does not interest the modern housewife nearly so much as the design of the fireplace and the arrangement of the cupboards in

the kitchen. It is legitimate, therefore, to emphasize those factors that appeal most to the prospect in hand.

The prospect admires the salesman who tried to sell him by honest effort far more than the weak-kneed salesman who allows the prospect to dominate the situation and continue to procrastinate. Not all prospects can be hurried, but the "sin of indecision" may be as galling to the prospect as to the salesman. Sometimes the prospect needs only a mild stimulus to enable him to reach a decision, such as the old trick of having the salesman carry a big fountain-pen which attracts the attention of the prospect. The salesman does not allow the prospect to use the pen until he is ready to write the order, when he hands the pen to the prospect for his signature. By that time the prospect is more interested in the novel pen than in refusing an order and he writes his name just to try the big pen. However, these little trick methods are not nearly so effective as real selling ability applied to the immediate sales situation.

Each prospect varies in his susceptibility to assistance in making the decision to buy. Some prospects sell themselves. Others must be pushed and tugged at. Still others need a simple sales technique to do the thing they want to do but cannot, because the habit of turning down all salesmen is too strong to allow them to lift themselves out of the channels of indecision.

Aggressive selling tends to produce more orders than easy-going salesmanship. The man who has lived among farmers knows the pleasure they get from chatting with strangers. It is often assumed that, when selling to farmers, it is necessary to use a sort of easy-going, chatty sales canvass. A sales manager who traveled with a sales crew that sold a five-dollar product to farmers found that the salesmen who used the most aggressive and shortest canvass had the biggest sales records. The salesmen who spent not more than ten minutes with any one farmer made the greatest number of sales. Action begets action. The most common methods of stimulating prospects to act are:

1. An aggressive definite sales canvass.
2. The use of a minor decision, which makes it easy to buy without a big decision.
3. Getting the prospect into an agreeable and agreeing mood.
4. Showing the prospect that he can purchase with ease right now.
5. Showing him the danger of delay, as "A coming change in price," "Temporary trial offer," "Only one to a customer," "You are now losing $50 per month by not having it," or "The continued inconvenience should be ended now."
6. Appealing to his emotions: "Prove that you are a man of decision," "Sign now and surprise the children," "This is worthy of a business man of your prestige."

Types of prospects.—Psychologists do not like to classify people into types. Investigations show that so-called types overlap to so great an extent that types of behavior have little value, unless we think of types as extremes at the ends of a scale of conduct. However, many salesmen do try to classify their prospects into types. The most common classifications are:

1. The disinterested prospect.
2. The too-busy-to-listen.
3. The too-poor-to-buy.
4. The too-agreeable-to-buy.
5. The hard-boiled.

1. The disinterested type ranges from the man who is neutral to the one who is of frozen expression and manner. The salesman may continue to talk, mostly to himself; but all the while he knows that his words have made no more impression than the proverbial water on a duck's back. One salesman claimed that he had a remedy that would arouse this type of "iceberg." He deliberately stepped on the prospect's foot! Other less drastic methods should be used.

Sometimes the prospect's interest can be aroused by the demonstration of the commodity, or a number of definite questions can be asked that will compel an answer. When a question is asked the salesman should wait for an answer. If the answer is not forthcoming, the salesman should stop, repeat the question, and wait again for an answer. His attitude should show that he expects an answer, and that the question is sincere. One salesman who had met several prospects whose interest could not be aroused sat quietly by the prospect's desk, paged his order book, and said not a word until the prospect stopped his work and asked him what he wanted.

Sometimes the disinterested prospect can be aroused from his lethargy by assuming that he is going to order. The salesman may have finished his talk but the prospect says nothing. He just sits and waits for the salesman to make the next move; but he will react promptly when the salesman tells him that he takes it for granted that he wants the goods and then says: "When do you want us to make shipment; at once or at the end of the month?"

Some men arouse the interest of the cold prospect by playing on his hobbies. Some even go so far as to find out what food he particularly likes and then bring him some of his favorite delicacy, or they take him to dinner and induce him to talk after the meal.

Whenever a prospect's interest cannot be aroused, the salesman should check his method of investigating the needs of the prospect. Any man "will sit up and take notice" if the salesman mentions a thorny problem or shows that he can render a real service that fits the situation of the prospect. Remember the methods of the evangelist who preaches and exhorts for an hour and still finds his audience cold. He just goes after the sinners all the harder until he gets them to feel a conviction of sin. In like manner, the salesman must continue to redemonstrate and reassert his messages of helpfulness to the non-committal prospects.

2. The man who is too busy to listen needs the above type of treatment, except that, if a prospect really is too busy, it is well to ask for another appointment. In most cases, the too-busy prospect needs the treatment offered the disinterested person. If the salesman has studied the prospect's problems and knows how his commodity or service will help the prospect, he should be able to catch his attention before he can ask to be excused. Quick action on the part of the salesman will prevent the excuse of other duties. The sample or illustrative photographs put into the hands of the prospect will demand attention.

The prospect will respect the salesman who sticks to his guns and requests a reasonable amount of attention on the basis of mutual service and profit: "Of course, you are busy. But none of us is ever too busy to learn how to make more money. That is why my company asked me to call on you. I can show you in ten minutes just exactly how this might fit into your business and make money for you as it has for Mr. Blank, a friend of yours, who suggested that I call. If we were to try to give the same information by letter, it would take an hour or two of letter writing on your part as well as ours. Now watch what happens." The demonstration has then begun and, in most cases, the salesman will be allowed to go ahead.

3. When a person says that he is too poor to buy the article offered, the salesman should then realize that only one of two possible things is true. The salesman did not ascertain the prospect's financial standing in advance of his call or he made a poor sales canvass. Both situations are the fault of the salesman.

If the prospect would be benefited by the article offered, the salesman should be able to sell him. The salesman should keep in mind the fact that all our wants are relative. To keep alive, we need only a very few elemental articles; a little each of food, clothing, and shelter. But we do not live on the minimum subsistence level. A man who is "too poor" to buy a new car may buy a new device

for the office. Another man who thinks he cannot afford the office device will buy a new car. A woman who thinks she cannot afford a set of books for the children may buy a new rug for the living room and another may forego the rug for the set of books. The manner in which the available supply of money beyond our primitive needs is spent depends upon the way the prospect has been conditioned—his early experiences *plus* recent experiences *plus* the recent advertising and sales effort that have stimulated him. The salesman of an honest service has a right to go after a reasonable part of any prospect's available funds. And, economically speaking, he should go after it *hard*.

4. The man who prefers to win his battles by diplomacy rather than by force often acquires the art of turning down salesmen by agreeing most heartily with all that the salesman says, but he does not buy. This type of prospect is so agreeable that the salesman does not make a dent in his mind. As the salesman proceeds with his canvass, the prospect agrees with him. He is mentally ahead of the salesman. He may do the talking for him. He dominates the interview most agreeably.

The salesman is likely to be treated as an old friend. He may be offered a good cigar and be given plenty of pleasant conversation. The "glad-hander" often has a hobby to which the salesman must courteously listen. It may be golf, baseball, or fishing. But the result of the pleasant conversation is only a report to the house, such as, "I had a nice two-hour chat with Mr. X to-day. He is friendly toward our proposition but cannot order now."

As with other prospects, an aggressive demonstration is essential. It is well to thrust the article into his hand, or to ask him to take you out into the shop where both can discuss the use of your device in its relation to the business. Get him away from his usual place of turn-downs and he may react differently in a new setting with new conditions. The salesman should be just as agreeable as the handshaker who says, "You have a fine article. I like you and I'd like

to give you an order, but I can't right now. Perhaps some other time," but he should insist upon a sincere consideration of the facts. Some salesmen are constantly selling this agreeable fellow, and he will admire the manly hard-hitter more than the agreeing weakling.

5. The belligerent prospect has a "bear-cat exterior," but a "house-cat interior." When the salesman approaches him, the conversation has a staccato beat:

Prospect.—Well, young fellow, what d'ya want?

Salesman.—Pardon me, Mr. Rough. I do not want anything for . . .

Prospect.—If you don't want anything, why d'ya bother me?

Salesman.—You are interested in your present customers, aren't you?

Prospect.—Naw, not a chance. I'm positively not interested in anything an' I don't want nothin'. Go on.

Salesman.—You are a practical and successful man, I understand from others. But you've got to show me how you can operate your business and get 90 per cent of your first customers to buy again the first month after their initial order.

Prospect.—I didn't say that 90 per cent of my first customers ever repeat. If anybody tol' ya I said that, they're kidding you.

Salesman.—Very true. Here is a photograph of one of our Repeato Sets, installed by Mr. Buyer, in the town of Bizz, and that is just exactly what it did for him."

Prospect.—Well, go ahead and spin yer yarn. I'll listen.

What factors cause a man to delight in bullying salesmen? The possible causes are many, but it is probable that many of them are suffering from an unadmitted sense of inferiority and compensate for their feelings of deficiency by assuming the air of a martinet. Some of them have been cheated by preceding salesmen, perhaps years before, but they cannot bring themselves to admit it and forget it. If they could only recognize the fact that the other fellow outsmarted them and forget about it, they would conduct themselves in a normal manner. Many of these buyers would fly into a rage if they were told that, in their manner of handling salesmen, they are still little negativistic children who never quite grew up. Just as firmness and

patience help in dealing with children, so firmness and patience win for the salesman.

The door-to-door canvasser knows that the rude housewife who insults him does so because she is really afraid that she might buy if she listened to the salesman's story. She has not learned the art of listening to a salesman, deciding for herself as to what she wants, and then buying or dismissing the salesman according to her own decision.

Of course, some prospects are bullies because they are in poor health. A few delight in battling with any one who will offer an opportunity, like the Irishman who saw the street fight and wanted to know whether it was private or whether anybody could get into it. To such prospects it is a game. With others, the rough exterior is a matter of habit. They avoid constant interruptions by this bluff. Whatever the cause, once the salesman penetrates the rough exterior, he is likely to find that the real man is very pleasant.

Men of this vitriolic type admire the salesman who stands up and patiently and determinedly explains his proposition in a fair and interesting manner. Men who have salesmen of their own may be told: "Mr. Buyer, your company has salesmen calling on prospects for your business just as my company has me calling on you. You believe that your firm can render a mutually worthwhile service to your customers who need your goods. You expect buyers to give your salesmen a decent hearing. In like manner, my company has a right to expect a reasonable consideration from you. We do not want to sell you anything unless our goods meet your needs, and you know it. Now this is what I am trying to show you for your judgment. Here are the facts."

The psychology of selling summarized.—The salesman should not lose a legitimate sale if he has obeyed the psychological rules of selling. These rules are presented in the form of a play upon words in order that the salesman may be able to recall and use the principles. The formula is illustrated in figure 36:

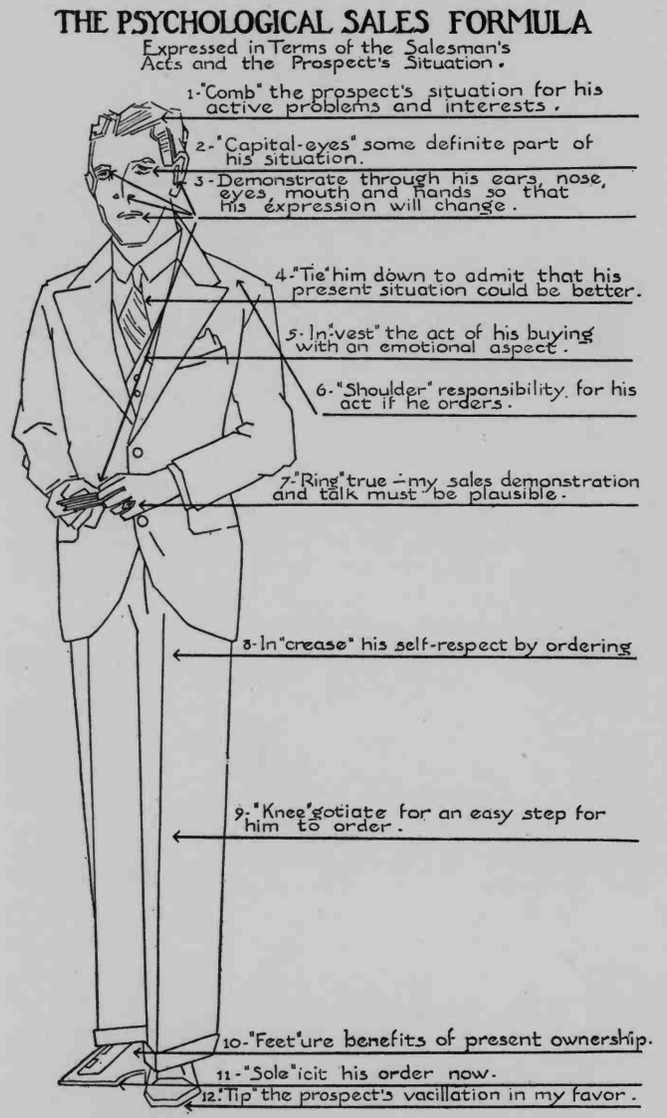


Fig. 36—The principles of the sales canvass have been illustrated by a "word-play" in order that the salesman can recall them when in the presence of the prospect.

1. "Comb" the prospect's situation for his active problems and interests. Talk with others who know the prospect. Find out his problems, hobbies, and interests.

2. "Capital-eyes" some definite part of his situation and direct the sales talk toward his needs. Deal with some specific part of his situation, such as costs or family happiness.

3. Demonstrate through his ears, nose, eyes, mouth, and hands, until his expression changes. Let him smell, taste, see, and handle your product, so that he will have an expression of interest.

4. "Tie" him down to admit that his present situation could be better. Show him by implication that his costs could be lower (or that his old article really does not do justice to a man of his standing).

5. In"vest" the act of his buying with an emotional aspect. Show him that the other big business men are now using your product (or that his family would get a great deal of pleasure from a new model).

6. "Shoulder" responsibility for his act if he orders. Quote data to show the number of satisfied owners you now have. Show the guaranty of the company.

7. "Ring" true. Your sales demonstration and talk must be plausible to him. Give your sales canvass before some friends who are not prospects for your commodity and ask them to tell you what statements are hard to believe.

8. In"crease" his self-respect by ordering. Show him installations or applications of your product in big concerns or as used by men whom he admires.

9. "Knee"gotiate for an easy step for him to make, which will mean that he will be ordering by means of an easy decision. Ask him how he wishes the goods to be shipped. Make the big decision incidental.

10. "Feet"ure benefits of present ownership. Explain the easy terms that will enable him to possess it now.

11. "Sole"icit his order NOW (or prepare him for the next call).

12. "Tip" the prospect's vacillation in your favor (really his own favor).

Failure to get the order.—Salesmen are often asked how many calls they are willing to make on a prospect before dropping him. The answer is dozens or hundreds. Some of the largest accounts that business firms have are the result of ten or more calls. One thousand retailers kept accurate check for six months to learn how many calls salesmen made on them before giving up the job as hopeless. Here is the surprising result of that check-up:

48.2 per cent made 1 call and quit.
24.4 per cent made 2 calls and quit.
14.7 per cent made 3 calls and quit.
12.7 per cent made 4 calls and quit.

Yet it was discovered that 60 per cent of their merchandise was bought by these dealers at the fifth call or after.[6]

Persistence is just as essential in selling to-day as it ever was. But mere persistence may be only boresome to the prospect and fatiguing to the salesman. Persistence means more than foot-work. It means headwork as well. Selling hard requires more than merely trying hard to sell. When the salesman finds that he cannot get an order, he should close his sample case without insisting upon an order, but he should prepare the way for his next call by saying: "I am sorry that I do not have with me a sample of our Palate brand of food. I shall ask the house to mail you a sample for your wife and when I call again in four weeks, you can tell me how you like it." Before the salesman makes his next call, he should write a friendly letter to the prospect and explain the profit or value of his article. Sagacity in selling is essential. If the sample scheme cannot be used, other forms of friendliness can be extended the prospect.

The salesman should, during the interview, have learned one subject that interests the prospect. He can bring the prospect a newspaper clipping, a photograph, a book, or

[6] *Advertising and Selling Magazine*, January 30, 1924, p. 21.

any other article or idea that will interest him. Each call means that the salesman must present something new and worthy of the prospect's consideration. The turn-down should not actually take place. The good salesman does not allow it. Each interview, when it ends, should not give the salesman a sense of relief. It should simply pave the way for another interview when new ideas may be presented in a new way with more attractive applications.

Projects.

1. Should a jobber's salesman wire the house for a better price when the buyer requests the salesman to do so? Assume that the salesman does wire for a better price and the house grants it. Will that buyer have less confidence in the salesman the next time he calls?

2. A manufacturer's agent calls on a dealer. The dealer says that he is not buying now because business conditions are too bad. Crops are poor. Nobody has any money. The dealer says that he does not want to sell very much now because he must charge it anyway. How should the salesman treat this type of objection?

3. Discuss methods of answering objections such as:
a. I want the exclusive agency.
b. I never had a call for it.
c. I'm all stocked up now. Got too much of your stuff on the shelf.
d. I'm too busy to talk to you now.
e. I'm satisfied with the house I buy from now.
f. You come to see me only when you can't sell Jones, on the corner.

4. When the salesman sells an article to large corporations, should he first try to sell the man at the top who approves the expenditures, or should he first sell the man lower in the organization who will use his article?

5. Do most buyers proceed on the theory that the average salesman is a "bunk artist" until he proves himself otherwise?

6. When the salesman has made a sale of a tangible article and the article is on the buyer's desk, should the salesman put the article out of the buyer's sight or allow it to remain in sight? Should the salesman leave at once or remain to chat after the order has been taken?

7. Should the salesman keep a card record of each call when he calls on regular customers and knows them personally?

8. Interview a salesman who uses a moving picture machine to demonstrate his product. What advantages and disadvantages does he mention?

9. Collect a list of magazine articles that describe the methods of exceptionally successful salesmen. Tabulate and discuss the methods used. What points are mentioned in most of the articles?

10. Figure 37 illustrates the popular concept of the attitude of salesmen toward the "swindle sheet." What types of business

Fig. 37—"Sure—have a filet mignon. I'll put it on my expense account as having my brakes relined."—*Reproduced by courtesy of The New Yorker.*

concerns inspect salesmen's expense accounts most closely? How can sales managers decrease unfair items on the expense accounts? Is Figure 37 typical of modern salesmen?

11. Should the salesman consult the directories and biographies of local men in his library in order to learn some facts of the personal lives of his customers? Should he send each customer a birthday card? Should he send his customers holiday greeting cards?

12. If a salesman has an emotion of fear while selling a prospect, he may have certain advantages over the salesman who feels superior to his prospect. Discuss these advantages and disadvantages.

13. If a salesman finds that he cannot make a favorable impression on an important prospect, should he ask to have some other salesman try to sell that prospect? Does such a request reflect upon the ability of the salesman who makes it?

Part IV

PREDICTING THE BEHAVIOR OF THE GROUP

Chapter XV

Several Predictions for the Marketing Executive

Predicting the Behavior of the Group

Predicting the market for the product.—Mr. William Butterworth, President of the United States Chamber of Commerce, speaking before the Louisville Conference, quoted a recent estimate that eight billions of dollars represent the annual waste in distribution. One billion dollars of this is claimed to be credit loss. He stressed the necessity of getting at the facts before production and consumption can be balanced.[1] When a new product is to be launched on the market, it is often the brain-child of an inventor or executive who has excellent ideas regarding the values of such an article, yet the public may not care for it. The public may need it, but it may be totally out of line with the wants of the people who are supposed to buy it. The writer was given a forcible lesson in this respect several years ago when he became interested in the psychological values of toys. Most of the toys which are now being sold for small children do not fit the mental make-up or needs of the child. On a trip to New York City, he visited one of the world's largest toy distributing firms. This company also employed a very able man who invented new toys. The inventor spent several hours in showing the various toys from all parts of the world which were being shipped to dealers. However, very few of the toys were psychologically sound. This fact was pointed out to the inventor, who went to a table of toys and said: "These are the toys that I have invented and they were all commercially successful. We have made a lot of money on them,

[1] "Domestic Commerce," United States Department of Commerce, March 11, 1929, p. 8.

but I do not give them to my own children. Toys are made to sell to dealers and parents, and not for children. The small child wants any new and colorful object, but that does not mean that he ought to have it. If we were to make toys to fit children, we could not sell them. As soon as parents are educated to the right kind of toys, we shall sell that kind. Years of education will be necessary before toys can be sold that fit the mental needs of children."

What the public needs is one problem; what it demands is often something entirely different. The chief means of obtaining a measure of the wants of the consumers is to study the reactions of consumers. Sometimes the needs and wants are discovered by accident, as in the case of Pyrex. The Corning Glass Works had been making glassware for semaphores and lanterns for years. This glass would stand a great deal of heat. One day the wife of a man who worked in the plant visited him and recalled that she needed a pudding-dish for her kitchen. She noticed one of the articles of glassware and decided to take it home and try it for cooking purposes. The glass proved to be an excellent baking utensil, and from this experience an old company developed a new and big business. Accidental discoveries of this sort do occasionally uncover a want of the consumer, but accident and guess are less reliable than scientifically conducted investigations of the market's possibilities. *Consumer analysis* refers to the study of the consumer's wants. *Product analysis* refers to the analysis of the product in order that it may be modified to fit the consumer's wishes.

Sales analysis refers to a study of past sales as a basis for a picture of the present status of the business and as a guide for further distribution efforts. *Market analysis* refers to the study of past sales, the product, and the consumer in relation to each other, in order that all factors may be effectively coördinated in future activities. A comprehensive market analysis offers the management a scientific measuring rod of the past efforts of the business, and the potentialities and channels for future business. Regardless of past successes of the business, the future must be forecast by frequent studies of the consumer and the

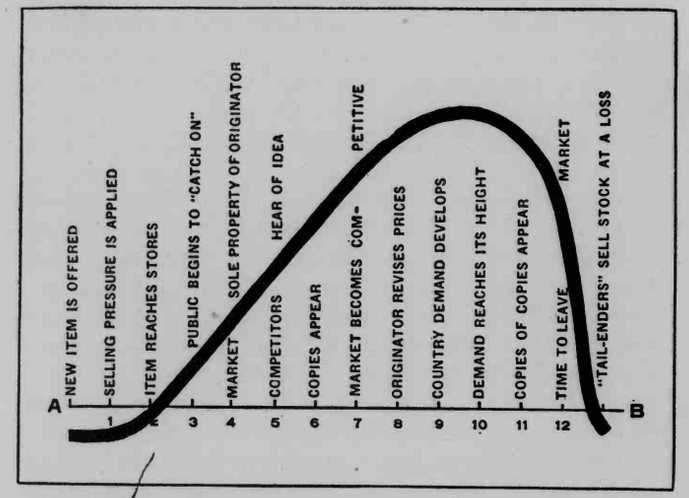


Fig. 38—The cycle of demand. The base line represents zero in demand. At point A, a manufacturer conceives the idea of a new item. Points 1 to 12 are convenient divisions of time. By force of salesmanship, the item is displayed and sold. From points 1 to 7, the market is the sole property of the company that introduced the new item. Then competition becomes so keen that the originator may find it advisable to abandon the item.—*From an article by Ralph Barstow, "One Guess Ahead of Your Market," the Magazine of Business, May, 1927. Reproduced by permission of the publisher.*

distribution channels. The new American tempo requires it.

One of the most common channels for making suggestive market investigations is the advertising agency. Many executives hesitate to authorize investigations by such organizations, because some agencies prefer to give emphasis to those findings that require the expenditure of money in advertising that will benefit the agency. However, many

of the reports of advertising agencies are unbiased, and not all of them recommend an extensive program of national advertising. Researches can also be made by professional research organizations which submit their findings without recommendations of advertising campaigns. The chief factor to be considered in market research is that of freedom from prejudicial influences either without or within the company. All the facts must be obtained and presented, regardless of any evidence that may appear to reflect upon the ability of important officials of the company.

The research man's investigations must include the facts of the production of the product as well as its sale. All trails must be followed no matter where they lead. When this is done, the analyst is likely to find that a strongly intrenched officer of the company is at fault. Facts that are already known to be basic in the problem of high sales cost and low sales volume are brought into the open and faced courageously, even though the favorite department of the company's president may be put into an unfavorable light. In one company the chief obstacle was the attitude of the president, who believed that his product was of such unusual quality that it would sell itself, and yet his sales curve did not rise in line with that of the entire industry.

The salesmen of a company that made a style product found that dealers made so many objections to the styles that the salesmen spent most of their time arguing with the dealers and vindicating the policy of the house. When they reported the complaints to the management, the sales manager passed them on to the vice president who was in charge of styles. This official resented any reflections on his ability as a stylist. The sales manager was told to get more orders and fewer complaints. The salesmen then shifted their criticisms to other aspects of the line which were given to the vice president in charge of production. This official accepted criticisms with less grace than the

style man. A serious danger to the future of the business was averted only by a market analyst who was brave enough to present the facts to the board of directors. It was only after an independent style man was hired and a working arrangement made with the production manager that the company was able to regain its prestige.

The executive in charge of production whose costs are too high will insist that his costs are right, but that the competitor does not know how to figure costs and must sooner or later go out of business. This kind of argument is usually an alibi, because the competitors do not often go out of business. When the highest official of a company blames the incompetency of a competitor it is well to dig underneath his claims, find the actual costs, and locate the leaks. Little slips here and there in many different departments may disclose an aggregate of costs that absorb the profits. Blaming competitors does not solve the problem of marketing at a loss or at a small profit.

Too often the number of pages in a market report is accepted as evidence of great value. The competent market analyst does more than tabulate the consumers' wishes; he also presents known facts in their proper relation to the executives of the company. The human side of research reports may be more significant than the thousands of statistical tabulations that are colorfully graphed. The human side of a market analysis is not limited to the executives of the company. Quite often the crucial human factor in unsatisfactory sales lies within a class of individuals in the chain of distribution, as with mechanics who dislike to install an article, or with labor unions, sales clerks, or transportation company employees.

Of course, the market research man should do more than ask executives for their opinions as to what customers want and think. He must study the company's records as well. Bausch & Lomb Optical Company analyzed its sales in terms of *whom to sell, what to sell, when to sell,* and *where*

to sell. It classified its goods into 24 major groups and 428 subgroups and the prospects into 8 major groups and 204 detail groups. This showed what to sell and to whom to sell it. The company was under the impression that the market of one product was limited to 600 outlets; the research revealed more than 6,000. Each classification has its own advertising budget and any direct mail expenditures can be checked and modified for the best results. Waste is reduced to a minimum. It was found that 8,000 pieces of direct mail per month had been saved by eliminating duplications and dead prospects. In some cases, the company had been sending out five catalogues to one man, and each catalogue cost about one dollar! At the same time many good prospects were not getting catalogues. Also, each salesman's territory was analyzed for him, so that he knew where his prospects were located and how to reach them. This plan of analysis was first tried out in one territory, and was found so profitable that it was applied to the whole country.[2]

One of the most important discoveries made by the market analysts is that markets cannot be predicted on the old plan of political divisions, such as states, counties, and cities. The *trading area* follows the lines of commerce and permits a more exact allocation of trading possibilities. T. O. Grissel based the extent of trading areas on the circulation of newspapers around main trading centers. In this way the advertising and sales efforts could be coördinated with properly selected wholesale and retail outlets rather than applied to areas which seemed to have sales possibilities. To try out a new product, it is necessary to select a try-out market that is average rather than exceptional. Some companies study past records of sales in various territories and select three try-out markets—easy, average, and difficult, for that type of product. One company manufacturing shredded codfish sent investigators to a city to interview consumers regarding the number of times they served fish each week. The reports indicated that the people there served fish unusually often, and, on the surface, it appeared to be a good potential market for advertising and sales effort. Further investigation showed that a large Jewish population in one section of the city had been responsible for the high consumption, but that they ate only certain kinds of fish—smoked herring and flounders. Shredded codfish would have met a strong sales resistance. This city was then reclassified as a try-out market of the difficult rather than the easy type.

[2] Ramaker, Benjamin J., and Salisbury, G. R.: "Bausch & Lomb Apply the Four W's to Sales," *Sales Management and Advertisers' Weekly*, Oct. 27, 1928, p. 230 ff.

Some of the characteristics of a trading area that are considered important as indicative of a try-out market are:

1. The area should have a variety of activities. College towns, steel towns, furniture cities, farming sections, and similar places cannot be considered as typical cross sections of a national market.

2. The area should not have a preponderance of certain population groups or nationalities. The census figures should indicate that the try-out market has the same distribution of races and nationalities as the country in general.

3. Competition from other brands should be normal. If several national advertisers of similar products are using an area as a battleground to establish leadership, a newcomer would not have a fair show in the struggle. A local brand may be so well established that results of a try-out campaign would be typical of other areas. The local brand has certain strategic advantages of close personal contact and geographic facilities that can give a try-out campaign a distorted picture of the possibilities of a new brand or product.

4. The area should have average wealth. The bank deposits, savings accounts, car registrations, number of telephones, and homes owned per capita will assist in determining whether the area is a typical try-out market.

In testing the salability of a new product, some established companies have given their dealers a stock of the

new article and then allowed the article to sell itself. They assume that, if the article will sell on its own merits without the producer's assistance, it will therefore sell much better with extra effort. This policy is dangerous to pursue, because many new articles are meritorious, but need some educational efforts to supplement their intrinsic worth. The better method is that of planning a definite trial or test campaign in selected and typical trading areas or with typical classes of customers. Quite often the investigation can be made to pay for itself and show the most profitable means of distribution.

Predicting the effectiveness of advertising copy.—The experts in the field of advertising differ very decidedly in their opinions of the practicability of testing advertising in advance of publication. Some of these experienced men are disdainful of the possibility of predicting results; others are quite convinced that it can be done; and some go so far as actually to test their advertisements before they are run in expensive publications. The difficulties in testing copy vary with the product and the methods of advertising. If an advertisement is to be run in newspapers, the story of a particularly horrible murder or any great news event may put most of the readers into a frame of mind that will cause them to neglect all advertisements. However, the advertiser cannot hope to control the outside world. His job is to prepare copy that is good when all other factors are equal. Of course, all other factors never are equal; but, since he cannot control all factors, he should make his tests on the assumption that the noncontrollable factors are equal. In the long run, the exceptional conditions will cancel themselves, and, after years of testing, he ought to have some valid principles established for his own advertising.

The most common methods of testing advertising in advance are:

1. The opinion of the man who wrote it.
2. Opinions of employees or associates.

3. Opinions of salesmen of the article.
4. Reading it aloud to typical buyers.
5. Letting the customers write it.
6. Using a "dummy" publication for the customers.
7. Testing the main parts separately in the laboratory.
8. The direct mail method.
9. The test run.

None of these methods has been studied on a comparative basis. Statistics are not yet available which indicate the validity of any of these methods in comparison with other methods. Nor has common usage established the merits of the several methods for specific purposes.

1. It is probable that the most widely used method of testing copy or the value of any form of advertising is the poorest method—the empirical judgment of the man who creates it. It is true that the experienced advertising man does have the art of influencing people, even though he cannot always describe his skill in scientific phraseology. Advertising must continue to remain an art, but this argument is often an excuse used by many advertising men who admire their own products. Sometimes they admire their own advertising out of proportion to the influence that it exerts upon the readers. Copy writers of the old school of advertising scoff at the idea of being able to measure their art. If sales go up, because of the secular trend of the industry, the advertising men prefer to accept the credit for the growth. If sales go down, these nontesters can take refuge behind accusations against several other departments, such as the inefficiency of production or sales. Any one who has ever written advertising knows that some of the advertisements which were believed to be "the best ever" in the home office were mere "duds" with the readers. And other advertisements that appeared to be weak or defective in many respects "pulled" large results. The man who writes copy or prepares any form of advertising is incapable of judging the true worth of his own products. His own guess is, in most cases, better than that of an indi-

vidual member of the general public, but one or two guesses from any one have little value.

2. The opinions of employees, associates, and members of the family of the man who writes advertising may be better than the writer's own opinion, provided he asks the opinions of enough associates and uses a definite technique. The writer knows several advertising men and calls at their offices occasionally. Quite frequently he is asked whether he likes this copy or that layout, and some of these advertising men can be told frankly as to what the observer believes and how he reacts to the proposed advertisement. In other cases, the advertising man may be slightly "touchy," or he may have spent several days on a job that is ready for publication. It would be dangerous to a friendship to express a true opinion in such situations. Advertising men are human, and, when they ask their friends and fellow-employees for opinions of their ideas, it is doubtful whether they get an honestly described reaction. One experienced advertising man takes the proposed advertisement to others and tells them that he frankly thinks there is something wrong with the ad but he doesn't know what it is. The observers then feel free to examine the sketch or copy for the weak spots and they give many valuable suggestions. This method is vastly better than asking for a frank opinion when the conditions do not induce frank opinions. The danger of this method is that, when the office boys or stenographers are allowed to analyze advertisements, they become critics rather than readers of advertising. The copy writer may be too greatly influenced by the opinions of a few persons, whereas he needs the opinions of many. The office boy may look at a proposed illustration and say: "That reminds me of a house falling down." The artist tends to assume that the office boy's reaction is typical of all readers and destroys his sketch, whereas the office boy's reaction may not be at all typical of the readers.

3. It is natural to assume that the effectiveness of copy can be predicted by having the company's salesmen pass

judgment upon the proposed advertising. This method should be tested before its validity is assumed. Bernard Lichtenberg of the Alexander Hamilton Institute described his attempt in this respect:

> I had heard so much about college professors claiming results from classroom tests of advertising copy, that I said to myself, "Why can't we be guided by the opinions of the 200 salesmen in our own organization? Surely, since they follow up leads obtained by the advertisements, their judgment ought to be at least as good as that secured for any other laboratory test. And surely, if we prepare three pieces of copy for every contemplated insertion, they'll help us eliminate the two relatively poor pieces."
>
> But, before testing the advertisements on the salesmen, we decided to test the salesmen on the advertisements. We provided all the salesmen with proofs of ten tested advertisements which had recently appeared and asked the salesmen to rank the advertisements in the order of their effectiveness, measured by cost per order. All these men are acquainted with the Institute's advertising, but not one of them was able to rank the ten correctly. The best possible score was 100 and the worst 0. The winner won by a score of eighty-eight. By far the majority of the contestants scored in the forties and the low fifties, that is, hardly right or wrong—as mere guessing would in the long run tend to give the average mark of fifty.
>
> But the interesting part of this story is that when we asked the winner just how he had gone about winning the prize we found that he had not done the usual thing of guessing which copy was good or bad. He had traced back, through the leads we had supplied him, the original advertisements, and ranked them on the basis of his personal experience with them.[3]

4. Some copy writers give the proposed copy to typical customers and have them read it aloud in their presence. The copy writer follows the reading by means of a carbon copy and notes the points where the reader appears to be bored or hesitates over the proper inflection of words or the construction of sentences. He also tries to rate the amount of enthusiasm that the readers exhibit toward the

[3] Lichtenberg, Bernard: "Test Copy on Results, Not on Opinions," *Printers' Ink Weekly*, Nov. 8, 1928, pp. 128, 129.

copy by questions that they ask about the product or their willingness to send for an inquiry.

5. When this method is used, it is a natural step to ask the typical customers to rephrase some of the sentences, to add new sentences, or to suggest a new approach to the whole advertisement. Much depends upon the intelligence and interest of the chosen consumer critics. Copy writers who do a great deal of writing for any one advertiser often locate, for themselves, typical customers who are willing to take the time to express opinions about their advertising.

6. When publicity advertisements without coupons have been run in magazines of small circulation and it is desired to select several advertisements for use in more expensive media, a dummy magazine may be prepared which contains the advertisements that are to be evaluated. Many different methods may be used to determine the best advertisements. A dummy magazine can be made and given to typical readers, and each reader can be asked to recall the advertisements that he has seen; or he can be shown a large number of advertisements which contain those in the dummy and asked to indicate the ones that he is certain he has seen, those of which he is fairly certain, and those which he knows that he has not seen. When such laboratory methods are used, it is important to treat the data with the proper statistical procedure in order that guessing may be eliminated from the conclusions.

7. The dummy method can be used in selecting good advertisements that have not been run in a publication. The advertisements to be tested can be split into their main parts—headline, copy, illustration, layout, etc. Example: the dummy may consist of various headlines, and the readers may be asked to recall the headlines after they finish looking at the dummy. Copy and the other parts of the advertisements may be treated in the same manner. Such a procedure has its advantages, but it must be kept in mind that our reactions to a series of heterogeneous parts are not the same as to those of an integrated unit. For

example, we might be asked to indicate our preferences for the various features of the human face, such as eyes, nose, mouth, hair, teeth, etc., and yet, if we should see a person who had all the characteristics that we selected, we might not consider him nearly so beautiful as some one else whose beauty was wholly integrated into a pleasing unit. This criticism of the heterogeneous versus the homogeneous is particularly applicable to most laboratory tests. The laboratory technician must proceed by isolating the factors that he wishes to study. This very scientific principle often vitiates the value of his study. As readers, our reactions to advertisements are always to the advertisement as a whole and not to its specific parts. Many of the laboratory studies of specific parts of advertisements have given some very valuable results, and such methods are better than the personal opinions of the creators of the advertisements; but they should not be accepted as final. The public's reactions to the advertisement when published in a typical medium of small circulation is the safest method of predicting the value of any advertisement.

8. If the advertisement cannot easily be tried out in a cheap medium, it may be possible to have a direct mail piece made of the copy and illustration and then send each proposed advertisement to a thousand customers with a standardized card or order blank in order that the pulling power of the various proposed advertisements may be compared. The main difficulty of this method lies in the fact that the requirements for magazine advertising are not the same as those for direct mail. It may be difficult to embody the proposed advertisements into a unified direct mail piece.

The various methods of testing copy by subjective methods have some value, but opinions of experts and typical customers are not so reliable as we might wish. This need not be considered strange, when we realize that teachers of school subjects do not agree among themselves when grading pupils' papers. In one experiment two final examination papers in first-year high school English were

graded by 142 English teachers of as many high schools. The marks of the one English paper ranged from 64 to 98, and of the second paper from 50 to 98. A final examination paper in American history was graded by 70 history teachers, and their gradings varied from 43 to 90. We might expect greater variations in estimates of history and English papers than in mathematics examinations; but, when a final examination paper in geometry was graded by 114 teachers of mathematics, the grades ranged all the way from 28 to 92. Where all the teachers belong to the same school and teach the same subject under the same system they differ very markedly in their estimates of pupils'

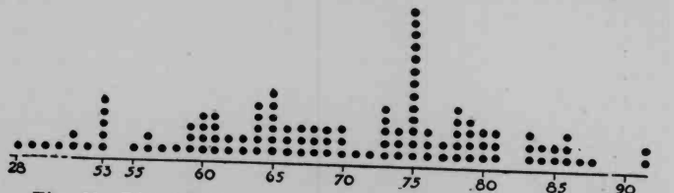


Fig. 39—Distribution of marks assigned to a final examination paper in geometry by 114 teachers of mathematics. Each dot represents the mark given the paper by one teacher. Marks represent percentages of excellence.

papers. Each teacher has different standards for penmanship, spelling, grammar, neatness, etc.[4] So each person who evaluates an advertisement tends to have his own standards of excellence for headline, typography, illustration, copy, etc. The only sound method of predicting the strength of an advertisement is to try it on a typical but small group in inexpensive media.

9. To test advertising in daily newspapers, some advertisers select six typical cities and run each of six different advertisements for one week in each city. The advertisements are so arranged that each advertisement is run in each of the six orders. This prevents misjudgments on the basis of the cumulative effect of the preceding adver-

[4] Starch, D., and Elliott, E. C.: "The Reliability of Grading Work in Mathematics," *School Review*, vol. 21, 1913, pp. 254–259.

tisements. Such a six weeks' method does involve a great deal of time and may be expensive, but it is the only safe way to predict the effectiveness of such advertisements. The advertising expert who believes that he can analyze an advertisement and predict by his subjective analysis the effectiveness of that advertisement is a dangerous man. His estimate may be worth more than that of the girl at the switchboard in the office, but he is apt to be sadly mistaken if he continues to make predictions.

Predicting coupon advertising returns by months.—When the advertiser inserts an advertisement in a monthly magazine and makes a definite appeal for the return of coupons, he knows that his advertisement will continue to pull longer than one month, or until the appearance of the next issue. A monthly magazine pulls about 50 per cent of its final total within four weeks. The returns will continue to come in for six months, after which he will receive less than 2 per cent of the total. However, at the end of one month, he can predict what the total returns will be.

The returns from an advertisement in a weekly can be predicted as readily as those in a monthly magazine. The predictions depend upon whether the weekly has a local, a state, or a national distribution. News-stand sales are slower than mail distribution and affect the percentage of coupons received within any given period. However, the advertiser can readily plot a curve of coupon returns for each publication. Of all the periodicals, the returns from newspapers come in most rapidly, and, at the end of one week after the issue of the paper, the advertiser will have at least 80 per cent of the total number of inquiries or coupons. Once the predictions of this factor of returns have been computed for a given type of advertising and periodical, the estimates will not vary more than 5 per cent above or below the prediction figure.

In forecasting the number of inquiries that will be received from a monthly magazine, the month in which the

coupon is advertised has some effect upon the total returns. According to A. T. Falk of the Gordon-Van Tine Company:

> If an ad in the *Iowa Homestead* produces three times as many inquiries when run in January as when run in June, then a *Ladies' Home Journal* ad will also produce three times as many inquiries when run in January as when run in June. . . . Evidently the business of the farmer during planting and harvesting seasons has no more effect on his inquiry-writing tendencies than the city man's seasonal activities have on his response to building advertisements.
>
> Curves for state farm papers, national farm papers, and general magazines showed practically no variation.[5]

TABLE XXXVII

INDEX NUMBER OF INQUIRIES ACCORDING TO MONTH ADVERTISED
(Average for 12 months = 100.)

	Index Number	*Reciprocal*
January	184	.543
February	157	.637
March	107	.934
April	77	1.300
May	67	1.490
June	65	1.540
July	76	1.316
August	92	1.087
September	95	1.052
October	92	1.087
November	89	1.123
December	99	1.010

To the above column of index numbers of inquiries as presented by Falk, the writer has added the reciprocal of each index number in the column on the right. The reciprocal is found by dividing 1.00 by the index number. The reciprocal is essential when advertisements, published in different months, are to be compared in pulling power. Example: if advertisement A is published in January and brings 1,000 inquiries, it is not so good as advertisement B which is published in April and also produces 1,000 inquiries. To obtain the comparative pulling power of the

[5] *Sales Management and Advertisers' Weekly*, Feb. 9, 1929, p. 334. Taken from *Harvard Business Review*, January, 1929.

two advertisements, it is necessary to multiply the number 1,000 by the respective reciprocals and compare the two products—543 and 1,300. For any one company to use this method of adjustment for seasonal variation, it is necessary first to determine the monthly index numbers for the particular kind of advertising.

Predicting the returns from a series of follow-up letters.—In the case of sales from a follow-up of inquiries, the Brief English Systems, Inc., found that, of all purchases of their correspondence course in shorthand, 50 per cent of all sales were made from the first letter that went out in answer to inquiries. The second follow-up brought 25 per cent and the third closed 12½ per cent. The remaining 12½ per cent was closed by all other follow-ups.[6]

Another national advertiser who made sales by follow-up of inquiries found that six mailings were necessary to produce the greatest volume that selling costs permitted. Carefully kept records showed that

> Ten per cent of those who do buy, buy on the first follow-up.
> Fourteen per cent of those who do buy, buy on the second follow-up.
> Twenty-two per cent of those who do buy, buy on the third follow-up.
> Thirty-two per cent of those who do buy, buy on the fourth follow-up.
> Sixteen per cent of those who do buy, buy on the fifth follow-up.
> Six per cent of those who do buy, buy on the sixth follow-up.[7]

Every experienced direct mail advertiser knows that he must determine by experiment, the optimum numbers of follow-up letters. The point where cost of mailings and profits from returns just balance in the number of follow-up mailings should be determined for each advertiser and method of selling.

[6] Whitmore, Eugene: "Advertising that Paid Its Own Way Built this Business," *Sales Management*, July 7, 1928, p. 48.

[7] Bosworth, Clarence E.: "Expensive Inquiries and Cheap Replies," *Advertising and Selling Magazine*, April 17, 1920, p. 65.

Predicting fashions.—Many people think that fashions in dress develop as the result of the whims of a few Parisian couturiers, actresses, and the Prince of Wales. Irene Castle bobbed her hair and thousands of women gradually followed her example. The Prince of Wales came to America in 1924 and wore two double-breasted blue suits. The sales of double-breasted blue suits of this type had been estimated by manufacturers as about 3 per cent of the total; but in 1926 they constituted 45 per cent of the number of men's blue suits. Fashions do arise occasionally through the chance selection of some notable; but, in most cases, they arise through a definite and complex system.

A distinction should be made between style and fashion. Manufacturers, couturiers, and tailors create styles. *Style* is a distinctive feature of any article. *Fashion* is an accepted style. All fashions are style, but not all styles are fashion. Style does not change, but fashion does. Nor do the fashion writers and stylists invent fashion. They simply observe and report the choices of fashionable persons all over the world. Fashion can be predicted, and the business man who deals with fashion products must make successful predictions.

Time was, when a manufacturer of women's clothing told his designers what to plan, the factory what to make, the salesmen what to sell, and the dealer what to buy. The dealer then told the public what to wear. In this way his mills could run on the same pattern for several months and his problems were far simpler than at present, when he must hire stylists and other experts to forecast what the public will buy. If his guess is correct, all is well; but, if it happens to be too far astray, profits are endangered. The manufacturer never suffers from overproduction of the fashionable patterns. The overproduction and losses come from poor patterns and "drops." One company that manufactures fashion products found that of thirty-six patterns the ten best selling patterns constituted 60 per cent of their total sales, whereas the remaining twenty-six patterns gave

but 40 per cent of the volume. It is not unusual to find a few patterns that outsell scores of others in the same line.

Many problems arise from fashion changes, as indicated in the 1929 mode for sunburn and the accompanying trend toward nothingness in apparel. The possible effects [8] were:

Disadvantages	*Possible Advantages*
1. Loss in hosiery sales.	1. Rise in cosmetic sales.
2. Loss to hosiery mills.	2. Busier beauty parlors.
3. Effect on silk growers.	3. Money not spent for apparel diverted to other merchandise.
4. Less yardage in apparel.	4. Demand for more types of apparel.
5. Less jewelry worn.	5. Tends to stabilize overproduction in apparel trade.
6. Fewer corsets and girdles worn.	6. Better quality of merchandise.
7. Sales loss meant loss to advertising.	7. More colors benefited dyeing.
8. Dull summer season became even slower.	8. Interest in footwear meant better quality of shoes.
9. A strong seasonal mode tended to upset market conditions.	9. Cotton apparel increased, as it was in the spirit of an informal mode.

The sun-tan mode did not arrive full-fledged in some mysterious manner, but was heralded several years in advance, as shown by the statistics based upon reports in *Women's Wear Daily*. These data [9] showed the leading hosiery colors worn in consecutive summers from the year 1924 (July) to 1929 (April):

1924	1925	1926	1927	1928	1929
White	White	Grain	Grain	*Nude*	Sun-tan
Black	Black	White	*Nude*	White	Lido Sand
Grain	Beige	*Nude*	White	Grain	Grain
L. Gray	Grain	Atmosphere	Atmosphere	Atmosphere	*Nude*
Shell	*Nude*	Beige	Sandy Beige	Mirage	Sun Shades

In general, it appears that fashion is more powerful than sales promotion. Some advertising and publicity men believe that advertising will cause a style to become a fashion. Few important trends in fashion have ever been greatly influenced by advertising or sales promotion methods. Of course, advertising may give impetus and

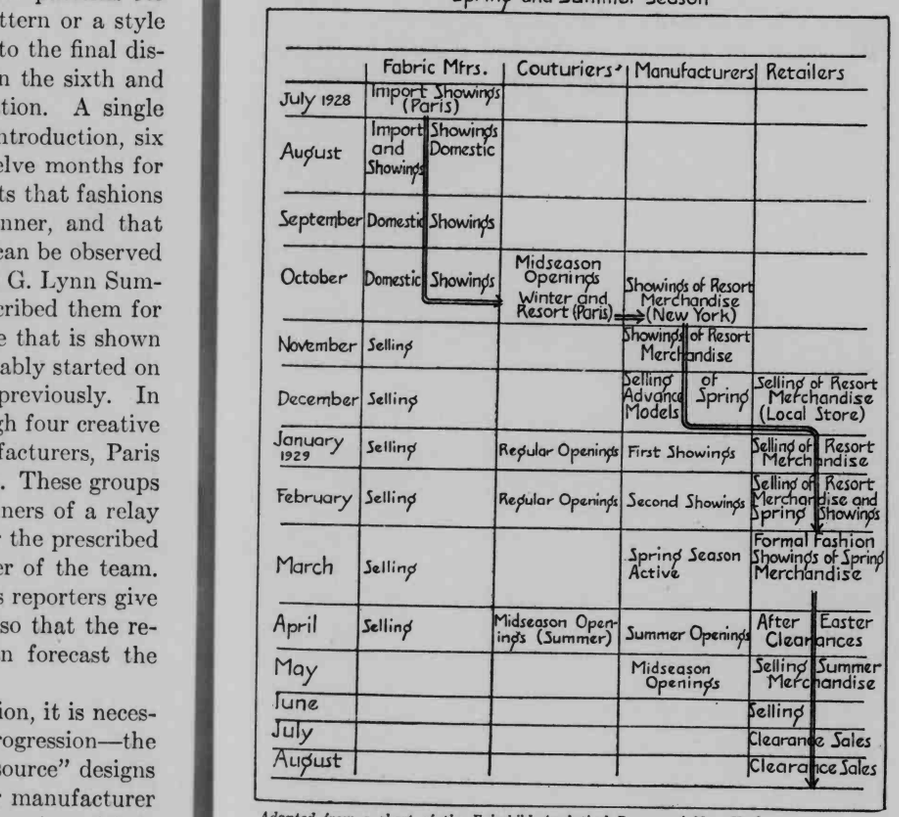
[8] Du Bois, Marie: "The Sun-Tan Mode Arrives," *Advertising and Selling Magazine*, May 1, 1929, p. 28 ff.
[9] *Ibid.*

widespread acceptance of a style, but it must ride with the tide rather than attempt to change the current. A definite help is to get valid information about fashion movements and how they develop.

The magazines, who sell millions of paper patterns for women's clothing, estimate the life of a pattern or a style as two years from the time of introduction to the final discard. The high spot in sales occurs between the sixth and the twelfth months after its first presentation. A single pattern appears to require six months for introduction, six months for its popularity duration, and twelve months for its gradual disappearance. This fact suggests that fashions begin and end in some rather definite manner, and that these beginnings, progressions, and endings can be observed and predicted. Students of fashion, such as G. Lynn Sumner, have studied these movements and described them for the business man. Sumner says that a style that is shown in a shop window in the month of May probably started on its trip through the trade about one year previously. In the course of the year the style passed through four creative or distribution groups: French fabric manufacturers, Paris couturiers, dress manufacturers, and retailers. These groups operate in a manner similar to the four runners of a relay team—each carries the baton of fashion over the prescribed course and then gives it to the next member of the team. However, at each turn of the track, the news reporters give to the world the progress of each "runner," so that the retailer knows what has taken place and can forecast the styles that will be fashionable.

To understand how a style becomes a fashion, it is necessary to begin with the first phase of the progression—the fabric creators of Paris, who originate the "source" designs for clothing fabrics. If the fabric creator or manufacturer shows his materials in July, some of the American fabric manufacturers note the patterns and select, adapt, and create new designs. A few of the American manufacturers may even buy some designs for exclusive use in this country; but it should not be assumed that the American manufacturers, or any others, simply copy what they see and

Trade Progression—Women's Wearing Apparel
Spring and Summer Season



Adapted from a chart of the Fairchild Analytical Bureau of New York.

Fig. 40—The Trade Progression of a Fashion.

thrust their copies or adaptations upon the public. Styles are created by a few experts, selected by some, and finally used by a still larger group of consumers. Some of the

patterns do not meet with acceptance and are never heard of again. *Selection, Creation, Acceptance,* and *Use* are the four main principles of fashion development.

After the showings of the French fabric creators in July, the second phase of the progression begins when the Parisian couturiers take the fabrics and develop them into apparel—frocks, wraps, sports wear, etc. The couturiers' openings for new models take place in October.

The third phase then begins, when the hundreds of buyers from America go to Paris to choose from the three or four thousand designs that have been created for the selection of buyers. The designs that they see are not entirely new. A few decidedly new patterns are shown, but the majority are similar to those of the preceding season. The buyers choose their models and, by the end of October, the American ready-to-wear manufacturers, or cutters-up, are displaying the first American-made dresses for the winter resort season.

The fourth phase begins when the retailers come to New York and place their orders for their exclusive consumer trade. They buy for their customers who are of the winter resort class. The buyers make their selection in October and November, so that, by December and January, they are ready for the customer who is planning to go to Palm Beach, or a similar resort.

The main American resorts that influence the acceptance of a style are Palm Beach, Havana, California resorts, Pinehurst, and White Sulphur Springs. What the fashionable women there accept become the prevailing colors, fabrics, and silhouettes of the season. That is why fashion news from the South becomes the most vitally important factor in a great industry during January and February. It is the urgent importance of it that makes possible a retailers' newspaper of from 40 to 60 pages—*Women's Wear Daily.* It prompts the well-dressed woman to scan with eagerness the pages of her *Vogue* and her *Harper's Bazaar.* It lends a lively news interest to the rotogravure sections of newspapers. It gives to retail advertising of wearing apparel everywhere the vivid interest of news.

For, following on this first progression that leads to the appearance of smartly dressed women at the winter resorts, the whole chain of production and distribution moves on, profiting by the acceptance of favored colors, fabrics, and types of apparel designs. Among the couturiers, the manufacturers, the retailers, every step forward during the remainder of the season sees a sifting down, the discarding of designs that did not thrive, the concentration on favored colors, materials, and silhouettes, the eventual mass production of the so-called "Fords" that each season develops—those few fashions that catch the fancy of the great mass market.

January and February see the regular Paris openings, followed closely by domestic manufacturers' showings. March sees these same goods in quantity in the retail stores ready for Easter patronage. And April in the retail outlets sees the remaining stocks of this merchandise cleared through sales.

April sees the third and last subprogression begin in the Paris mid-season openings for summer. April, too, sees the summer openings of manufacturers here, and May their mid-season showings of summer apparel. By May the real summer selling season is on in the stores. It proceeds through heavy selling in June to clearance sales in July and August.[10]

Men's fashions.—The styles for men's clothes undergo fewer changes than those of women. In some countries of the world and among certain animals the male is the colorful sex. In America, extreme styles for men are frowned upon largely because we have associated pronounced smartness of dress in men with "dudes," actors, and characterless individuals rather than with the hard-hitting, capable man. In fiction, the character who wins the battle is often a ragamuffin in his youth and a diamond-in-the-rough type when he grows up. We have been taught that a man's external appearance is of little or no consequence. However, men's styles do go through certain definite changes, and the Prince of Wales is not the only influential factor in the change.

John Starbuck, one of the leading authorities in this

[10] Sumner, G. Lynn: "The Trade Progression of Fashion," *Advertising and Selling Magazine,* May 15, 1929, p. 36 ff. The Fairchild Analytical Bureau furnished Mr. Sumner much of the data from which I have quoted so freely.

country on men's clothes, states that the three most important influence-sources of styles for men in America are:

1. Yale and Princeton.
2. Wall Street.
3. Broadway.

Inasmuch as we are living in an age that is distinctly youthful in its thought and philosophy of life, the college student has the greatest influence. A generation or two ago, the college students who returned to small hamlets from city colleges were the first ones to introduce new styles into their communities. To-day, the cut of the lapel, lack of hose supporters, flapping pants, derbies, and suspender vogues received their first impetus from the college men. Manufacturers and others who predict the fashions for men send experts to the dances and teas which are attended by the Yale and Princeton students and tabulate the various lines, colors, fabrics, etc. Certain forecasts can also be made at Palm Beach, because it is there that the Wall Street men play. The Hotel Biltmore and Everglades Club are checking grounds of these style experts who count pin stripes, buttons, and bow ties. The clothing of these college men and others soon becomes the vogue for the smaller towns. An example is the adoption of the suspender. Late in 1925 the custom tailors of New York made trousers which required the wearing of the "gallus." In the spring of 1926, a New Haven tailor introduced them to the wealthier men of Yale. Suspenders then passed through the "luxury period" when they were on sale in the exclusive shops of New York at prices of from three to twelve dollars. Through the fall of 1926, suspenders were worn by an increasing number of students of Yale and Princeton. In January of 1927, they were quite evident in the University of Illinois. In November of 1927, Macy's ready-to-wear department reported that three out of five customers were asking that suspender buttons be sewed on their trousers. In March of 1928, a men's department of a Los Angeles store reported that they were selling four

pairs of suspenders to one belt. In May of that year, a count made at a national convention of salesmen showed more than 50 per cent of them wearing suspenders.[11]

Great changes have also taken place in the distribution outlets for men's clothing. In some parts of the country, twice as many suits are sold by house-to-house methods as by the usual retail trade outlets. One reason for this is the fact that many retailers cannot afford to carry a full line of men's patterns and sizes. By dealing with a direct-to-the-consumer agent, the business man can select the style, size, and pattern that he wishes. Some of the manufacturers of this type of clothing have designers who receive salaries of $50,000 per year and their ability is so much greater than that of the local custom tailor that the latter cannot hope to compete with them. It is probable that the sales to the consumer, made through a representative who brings his samples to the consumer's home or office, will continue to increase at the expense of the retailer and the custom tailor.

Designs in fashion products are changed gradually.—The great prosperity of the American people and the new American tempo have made us fashion conscious to a greater degree than at any other time in our history. The business man cannot hope to control fashion, but he must predict it. When he decides to change the design of his wall paper, cigar lighter, floor covering, automobile, etc., he must know what the public wants. Some firms have gone ahead on the assumption that the public is art conscious and wants the best designs that the minds of expert artists can originate. Such an assumption is dangerous, because the public taste changes gradually. The low-priced automobile should not copy the design of the highest-priced cars, but should gradually step up the design each year in accordance with the wishes of the general class of buyers who are one price-step higher.

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[11] Sumner, G. Lynn: "The College Man—Style Mentor," *Advertising and Selling Magazine*, June 26, 1929, p. 17 ff.

Cheney Brothers, silk manufacturers, have developed a three-phase system of prediction. Approximately 30 per cent of each year's production is devoted to novelties and new ideas; 40 per cent of the production is an improvement and development of the previous year's successful novelties and staples; and the remaining 30 per cent transforms and adapts the preceding year's outstanding style successes in kindred industries. A floor covering concern plans 30 per cent of the production on new styles of each season and 70 per cent in staples, in the ratio of each pattern's sales of the previous season. Style experts seem to be agreed in pointing out the danger of a radical change in pattern, but proceed on the basis of keeping a part of the production in line with the acceptance of the previous season and a smaller part to constitute the bid for the new.[12]

To assist manufacturers and distributors of style merchandise, a number of consulting organizations have been developed who render their clients a service similar to that of the established business forecasting services. In 1928, one such consulting organization had 188 executives attend their fashion clinic and each paid a fee of $200 for five days' attendance. A few of the largest manufacturers also have style experts who coöperate with their dealers and keep in close touch with the movements of various styles and sizes. These organizations have proved that it is possible to predict style changes just as easily and accurately as general and specific industrial conditions.

Can we predict the social and business changes of the future?—If fashions can be predicted, can we also predict the major social changes? Changes in business are not entirely due to new discoveries in doing business but also to changes in social life. Of course, many of our changes in social life are the results of scientific discoveries, but the three—science, society, and business—go hand in hand. We can review a few isolated examples of research and

[12] Suhr, Fred: "How Ten Companies Handle Style Change Schedules," *Sales Management*, June 8, 1929, p. 494 ff.

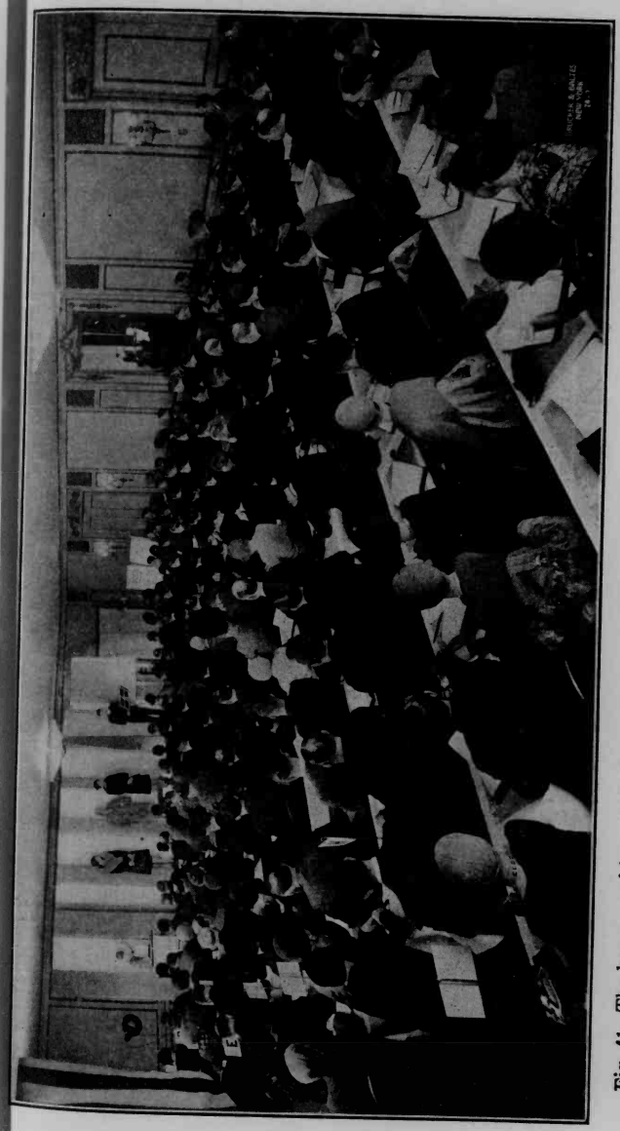

Fig. 41—The keenness of interest in the prediction of fashions is indicated in this picture of the second Amos Parrish Fashion Clinic in New York City. The clinic was held five days and 188 executives from all parts of the country paid a fee of $200 each to attend. Recent statistical studies of fashions prove that many fashions can be predicted and that business men can adjust their programs to utilize the demands of fashion.

INTENTIONAL SECOND EXPOSURE

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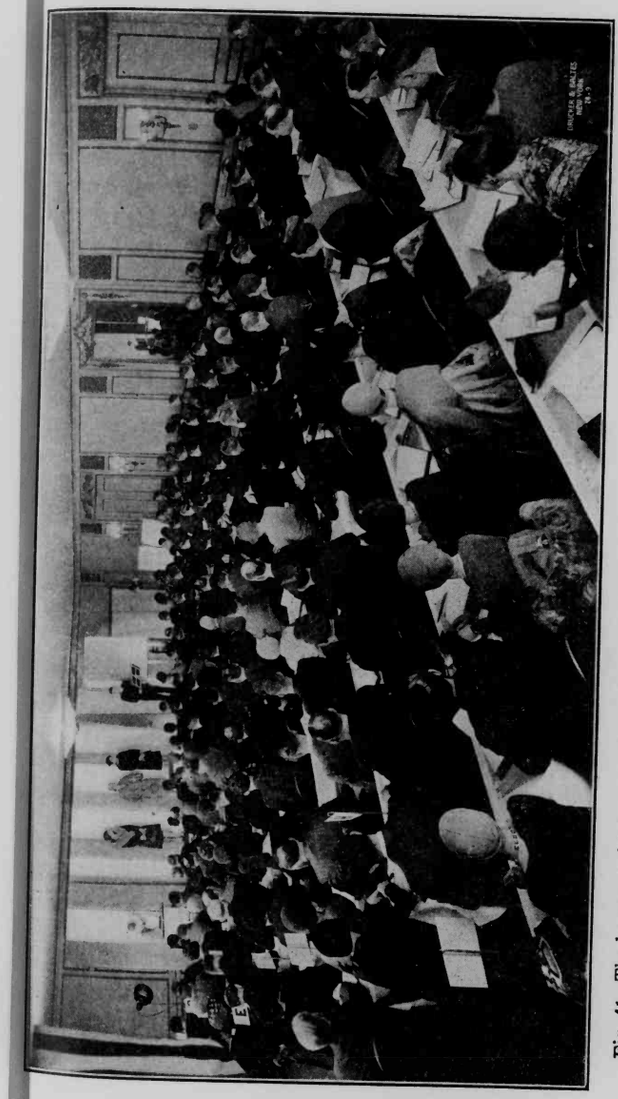

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changes that have already affected business or may do so.

The story is told that, some years ago, when Andrew Carnegie was a newcomer in the steel industry, he met a professor of chemistry at a dinner. Carnegie became interested in the professor's theories and decided that it might be well to allow a chemist to try to help the steel business. He hired the chemist and sent him to one of the Carnegie plants. When the superintendent of the plant found out what the professor wanted, he chased him out of the plant. The chemist reported his experience to Carnegie, who then gave the plant management definite and emphatic instructions that the chemist should be allowed to proceed in his experiments and that his advice in the making of steel should be followed. To-day, few steel companies would think of getting along without the services of one or more chemists.

Carnegie could visualize some of the changes of the future. The business leaders of to-day are visualizing changes that the rank and file cannot see. Some of these changes have been mentioned, especially such as the growth of research in business:

> In Continental Europe research along every avenue of human thought has been efficiently organized for many years, but it is only since the war that the United States has assumed a commanding position in research endeavor, being now second only to Germany in this respect. The National Research Council in 1921 reported 578 industrial research laboratories. There are now said to be fully a thousand such laboratories in this country and it is reported that the American people are spending two hundred million dollars a year on research, that thirty thousand workers in applied science are engaged in bringing the resources of science to the solutions of technical problems arising in industry, and that fifteen million dollars annually is being spent in coöperative research by trade associations alone, seventy of which are engaged in research activities.[18]

It is probable that business will find it profitable to subsidize pure research on an increasingly larger scale and that

[18] Shibley, Fred W.: "The New Way to Net Profits," Harper & Bros., 1923, pp. 172, 173.

the concerns which do not have research laboratories of their own must remain smaller than the leaders and take advantage of the "crumbs" that happen to fall their way. Some of the business men who are now in touch with research projects have the impression that we are near the limit of our achievements in the improvement of our distribution methods. Market studies and consumer analyses are so common that they are being made the burlesque of the advertising department. But these researches have just begun, as indicated by the reports of new discoveries in marketing methods.

The signposts of the present indicate that traveling salesmen of the future may decrease in number and local salesmen may increase. The former will be displaced by cheaper and quicker methods of selling. In many cases, the men will have to be of a higher type than are the salesmen of to-day, for often they will have to act as service or merchandise men, and, consequently, must be men who understand management and merchandising methods. They will have to become counselors of merchandise methods and assist the local distributor rather than merely take his order or persuade him to buy what he does not need.

The sales manager also will change. He will no longer be a kind of god who calls salesmen on the carpet and bawls them out or bullies them into courageous attacks on the quota. He will not be a kind of mental lasher of the stragglers on the force; but instead he will be a keen analyst of human nature who has sat at the feet of the clinical psychologist and learned how to reconstruct the mind of the cub salesman so that he will have the behavior patterns of the veteran. The psychologist is gradually learning how to recondition the broken-down mind of the extremely ill mental patients of the state hospitals, and one of the next contributions may be that of rebuilding the normal minds of raw material for the sales force. One reason why this kind of sales management is not now wholly or partly in operation is because philanthropists have preferred to

finance research projects in tangible objects rather than in the more abstruse explorations of the mental life. However, indications of this change are seen from time to time on the business horizon.

In selecting the raw human materials for the sales force or the factory, the employment man of the organization will use psychological tests more than he has in the past. These tests have been much discussed but little used.

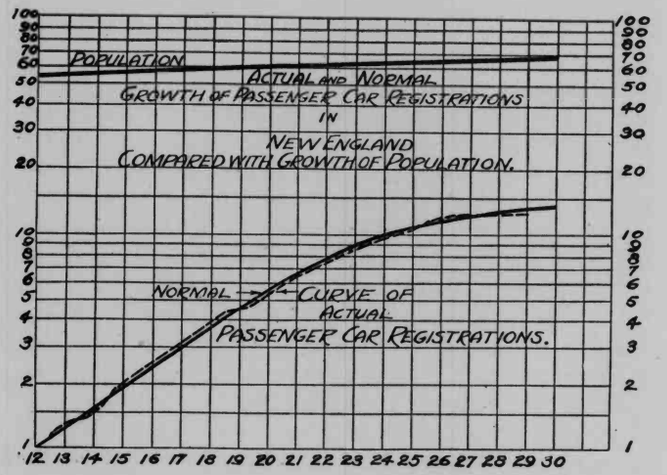

Fig. 42—"The curves of growth of population and of passenger car registration in New England are rapidly becoming parallel. Realizing this, it is absurd to try to change consumption by forcing methods."—From Ray B. Prescott, "Scientific Sales Planning on a Territorial and Seasonal Basis." —*Sales Management, June 29, 1929, p. 634.*

Many of them had little predictive value and few of the executives understood how to use those that did have value. So long as less efficient methods bring profits, so long will hiring be a matter of trial and error. Eventually, competition will compel each company to select employees with more accuracy, and tests will have to be perfected to fit the needs of business. The tests will no longer be the plaything of a stockholding executive, but a part of the

routine procedure in business management. Managers will be trained in the use of tests just as they are now trained in the use of cost accounting.

Our attitude toward labor has changed and is affecting our distribution system. When managements found that the manufactured commodities could not be sold, they tried to move the goods by lowering the price, and the price was lowered by cutting the wages. Now we realize that wages should be just as high as they possibly can be so long as they are consistent with efficiency in production. When the warehouses are jammed with manufactured articles, lowering wages of workers will tend to keep the goods in storage, as the workers constitute the bulk of the purchasing public. Sagacity in management, with high wages, will tend to move the goods out of the warehouse into the consumers' hands.

The open sesame to all these and many other changes which we cannot yet anticipate is *research.* Government data and laboratories will be of greater usefulness each year. The government researchers now can furnish any company with consumer purchasing capacity for each county of the country, but only a very few companies are using it for their sales territories. This information will not only be gathered, but will be put into form which will enable the business man to understand and use it.

Some of the changes in our biggest industries will be greater than even the most vivid imagination can picture. For example: modern cigarette smoking may give way to a more satisfying kind of habit. The "cigarette" of the future may be a synthetic product that will be harmless, but that will stimulate the sensory end-organs of the mouth far more delightfully than our present tobacco smoke. To utilize the possibilities of research and prepare for the coming changes, it will be necessary that the boards of directors of corporations be chosen for their ability to analyze and establish corporate policies rather than for their holdings

of stock or because of the personal friendship of the president.

In spite of the important part that will be played by scientific and cold analyses of the objective facts, the surviving concerns will be the ones who can combine the scientific with the human factors in business. Business will never become wholly mechanized. Some humans will still have to operate it, and human beings are going to remain very human. The psychologically sound principles are the ones that will have the greatest effect and will make the most important contributions to business and social advancements.

Dangers of predicting group behavior.—It is difficult to predict the social life, the business methods, and the distribution conditions of the distant future. Even immediate conditions cannot always be correctly prophesied. A decade ago, when skirts were longer, the fashion experts announced that skirts would be shorter. The shoe manufacturer misjudged the effect because, as one said, "Dame Fashion has come to the assistance of the shoe dealer by announcing that the new fall skirts will be shorter. Shorter skirts mean higher shoes."

Sometimes the public reacts to its own fad and speedily hurries back to its former custom. When bobbed hair became universal, many women developed a case of "contra-imitation" and decided to have long hair. Usually, social and business changes evolve toward some other scheme rather than return to a former state.

At the present time, we can find many prophets among our contemporary writers. Some of the world's best writers and scientists have produced whole volumes on probable changes in social life, industry, education, art, women, youth, religion, and many other subjects. Most of these writers study the present and then exaggerate the tendency of the times. Examples of problematical value are the prediction that machinery and chemistry will eventually take the place of the cow and that man will obtain milk

from a faucet in the kitchen in the same manner that he now obtains water. Since women tend to dress like men, in another decade we shall be unable to distinguish them by outward appearance. Since our food is artificial, we shall eat small chemical tablets in place of steaks and lettuce. Attacks on marriage are popular at present and some writers, therefore, abolish it entirely for posterity.

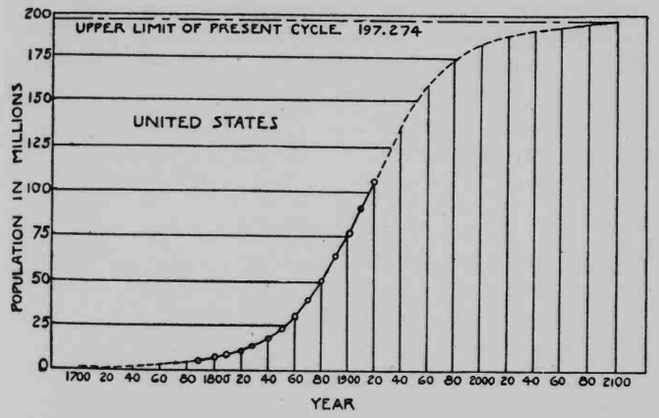

Fig. 43—The curve of population growth of the United States appears to follow a definite tendency that agrees with the growth curves of lower organisms. In the year 2080 the population of the United States will probably be 197,274,000. From Pearl, "The Law of Population Growth." —*Courtesy of Alfred A. Knopf, Inc., Publisher.*

The men who built the canals in the nineteenth century had visions of a country covered with canals and all transportation being carried on by means of inland waterways. They merely exaggerated their present. Their guesses now seem childish to us. In like manner, the business man must not assume that the tendencies of the present will continue uninterruptedly. New and unknown factors will bear upon the forces in social and business life and the highly successful methods and definite tendencies of the present will be relegated to the curiosity shop.

Communities whose population doubled in one decade cannot assume that it will double in the next decade. If the sales department showed a 50 per cent increase last year over the preceding year, it cannot be assumed that this year will bring a like increase. The fact that women wear their hair shorter than they did ten years ago does not mean, obviously, that they will shave their heads another season. Long-range prediction by extension of the present is dangerous; sometimes, it gives ludicrous results. Even though forecasts of the remote future are difficult, predictions of changes in the immediate future can be and often must be made. Their accuracy is essential to the continued prosperity of companies whose present activities are successful.

Projects.

1. Prepare a list of the reasons why men pay less attention to clothes than women.

2. Alexander Hamilton Institute ran advertisements with the following headings:

a. "Those Who Shy at Unpleasant Facts Should Not Read This Page."

b. "Men Who Are Satisfied to Wait Ten Years for Success Will Find Nothing Interesting on This Page."

c. "Afraid to Face the Facts—then Don't Read This Page."

d. "Men Who Know It All Are Not Invited to Read This Page."

One of these pulled marvelous results. Select the one that pulled best (see *Printers' Ink Weekly,* Nov. 8, 1928, p. 132).

3. Analyze the causes underlying the following changes in costs of manufacturing and selling:

A survey of several hundred businesses by the Bigelow, Kent Willard Company showed:

	1926	1927	*Per Cent Change*
Materials	$0.581	$0.557	— 4.1
Labor	0.190	0.188	— 1.05
Factory expense	0.149	0.151	+ 1.3
Selling expense	0.099	0.132	+33.0
Administrative expense	0.073	0.077	+ 5.5
Profits	0.084	0.068	—19.0

A 33 per cent increase in selling expense in a single year is nothing to cheer about—especially when six times greater than saving in labor and materials.—From Goode, Kenneth M.: "Buymanship," *Advertising and Selling Magazine,* May 1, 1929, p. 19.

4. What is the future of mechanical methods of retailing? Will the use of the retail "robot" increase or decrease, and why?

5. A well-known advertising research man made a study of the monthly fluctuations in the number of inquiries received from several hundred advertisements of food products, drug products, etc. The reply ratios for each month of the year were:

	Reply Ratios (Av. for 12 mo. = 100)	*Reciprocals*	*Adjusted Number of Inquiries*
January	102.0	_____	_____
February	134.0	_____	_____
March	124.0	_____	_____
April	108.0	_____	_____
May	91.5	_____	_____
June	75.5	_____	_____
July	68.0	_____	_____
August	72.0	_____	_____
September	96.0	_____	_____
October	122.5	_____	_____
November	120.0	_____	_____
December	86.0	_____	_____

Assume that a food manufacturer uses a different advertisement for each month of the year. Assume also that each advertisement brings in 1,000 inquiries. Use the above index numbers as measures of monthly variation. Compute, for each month, the reciprocal and adjusted number of inquiries. Complete the two right-hand columns.

CHAPTER XVI

Business Cycles

The managers of the modern restaurants must be able to predict the orders of their customers. Many of them know how much to order of each of the staple foods. A recent tabulation of the breakfast orders in the dining cars of a large railroad from March 1 to March 15 showed these interesting figures [1]:

Item	*Orders*	*Per Cent*
Apples	2,413	8.4
Figs	224	.8
Grapefruit	7,836	27.4
Lemons	3	.01
Oranges	6,009	21.1
Pineapple	165	.5
Prunes	1,588	5.5
Strawberries	139	.4
Total fruit orders	18,337	
Orders without fruit	10,135	
Total breakfast orders	28,512	

The man who orders the supplies of food for these dining cars can be fairly certain that approximately 35 per cent of the breakfast orders will not include fruit and 65 per cent will include fruits in the percentages indicated.

One of the leading businesses of America—the insurance business—is based upon predictions of the behavior of the group. The actuarial experts have calculated the death rate of all types of people and the members of all occupational groups. They know that fishermen, jewelers, farmers, clergymen, and blacksmiths have a low mortality rate, and that stone cutters, miners, and locomotive firemen have a high rate.

[1] Francisco, Don, "How Advertising Is Helping to Solve the Farm Problem," *Printers' Ink Weekly*, Sept. 6, 1928, p. 76.

The life insurance experts can predict not only the length of life of the members of the public but also the amount of insurance sold each month of the year. Just why insurance salesmen write less business in September and more in December than in any other months of the year has never been satisfactorily explained.

The cycles of business.—The individual business man, as well as the restaurant manager and insurance company, must make group predictions for his own business. The

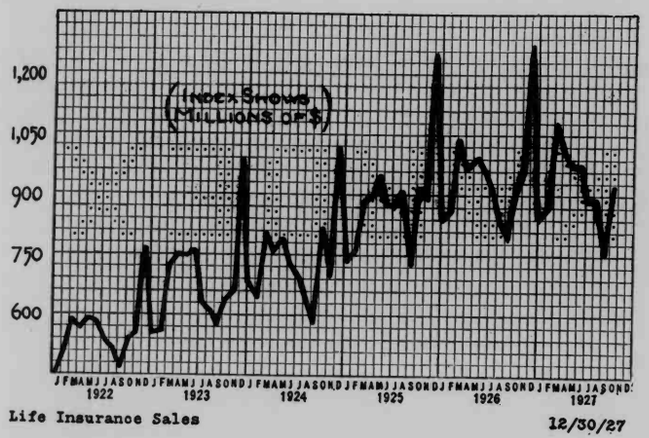

Fig. 44—Life insurance sales fluctuate in accordance with a recurrent seasonal variation.—*Courtesy of the Kardex Institute.*

modern corporation executive who directs the plans and programs of a business is often greatly concerned about the ebb and flow of "hard times" and "good times" that mark business activity of the country as a whole. The *business cycle* refers to the rhythmic movement of business depression and prosperity. It is a constant recurrence of irregularly separated booms and slumps and has received so much attention that universities offer courses in its study and professional experts prepare periodical reports on the rise and fall of the general business curve. Some experts claim

that the cycle has definite predictable fluctuations, and passes through five phases:

1. Depression.
2. Revival.
3. Prosperity.
4. Financial strain.
5. Industrial crisis.

In plotting the indices of the movements of business, note is taken of the *seasonal variation* or movements of items within the year. Just as the temperature changes within the year, so certain businesses rise and fall systematically year after year. This seasonal variation is of vast importance in certain kinds of businesses and the aggressive sales manager tries to level the seasonal variation curves for his own industry. An example of seasonal variation is that of monthly fluctuations in marriages. The public has the impression that most weddings take place in June and September. The investigation of a manufacturer of wedding rings collected the data which indicate that June brides do not predominate to so great an extent as is generally thought. The following figures[2] are taken from county records from all over the country:

January	6.8%	July	7.8%
February	6.5	August	8.7
March	5.8	September	9.6
April	7.5	October	9.1
May	7.6	November	9.3
June	12.0	December	9.3

The *secular trend* refers to the regular increase or decrease over a number of years. In most cases, it is a growth element that depends upon population or the development of industry. The secular trend is usually portrayed as a straight line, the slope of which measures the growth of the industry or business in its general trend toward greater or less volume or value. The aggressive executive endeavors to increase his own efficiency to the extent that the

[2] "The Editorial Page," *Advertising and Selling Fortnightly*, May 5, 1926, p. 33.

sales of his firm may have a curve of increase which rises more rapidly than the trend of business as a whole.

All statistical measures of the rise and fall of general business and specific industries are based upon the past. They can be used as a guide for the future only when the underlying economic and psychological conditions remain the same or when proper allowances are made for the differences that have occurred. Herein lies the main difficulty in making safe predictions regarding the future; international affairs, banking conditions, the public mind toward speculation and business, and other factors of influence are changing so frequently and pronouncedly that reliable fore-

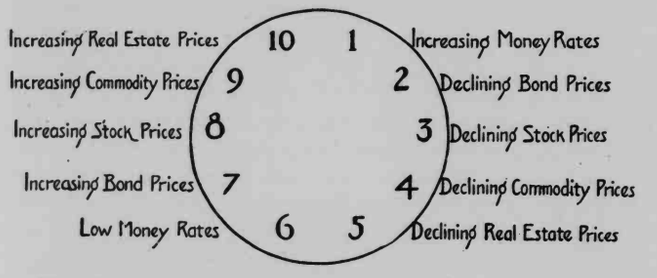

Fig. 45—The Cycle of Financial Prices Shown in Clockwise Movement.

casts are difficult. However, we are fairly certain that future fluctuations in the cycle are apt to be less violent and less frequent.

Indeed, most of our so-called periods of boom and deep depression are largely fictitious so far as general business is concerned. If we balance or weight all the several predictive variables, such as pig-iron production, sales on the stock markets, wholesale prices, etc., and plot these indices for a long period of years, we find that the deepest troughs of depressions and the highest peaks of prosperity indicate a change that is only 10 per cent above or 10 per cent below the normal line of growth. These estimates are too high for the country as a whole, because they are based upon

urban activity and large scale production. Actually, the change is not more than 8 per cent above or below the normal line. Of course, the mildness of the oscillations in the general business wave does not apply to the amplitude in the wave of activity, as this depends upon the ability of the leaders of those industries.

President Hoover's famous business conferences in the winter of 1929-1930 were an attempt intelligently to regulate the business cycle. His effort in this direction was the first serious program to level the peaks and the valleys in the curve of national prosperity. The stock depression of October and November, 1929, led to informal conferences with the President, in which business leaders committed themselves to maintain employment and wages, so far as possible, thus assuring to that extent a continuance of consumers' purchasing power. They agreed to coöperate in devising ways of continuing and expanding maintenance work, replacements, and renewals in carrying on the normal development of the country. It is difficult to measure the real effect of the meetings, but their psychological influence helped to build confidence in the business outlook. At any rate, the conferences suggested that the several phases of the business cycle need not be accepted fatalistically, but should be anticipated and controlled.

Several important psychological factors should be considered in the study of the general and specific business cycles. Undoubtedly, strong economic forces do operate in causing the rises and falls in the curves of business activity. Still, the causes of these fluctuations are often the result of men's mental states rather than nonhuman physical or economic laws, as illustrated in this incident:

There was once a successful French artist. It was his custom to eat dinner every evening in a small but select restaurant near his studio, and, being of discriminating tastes, it was his practice to have one small bottle of rare wine with his meal.

One evening he entered the restaurant, and, while waiting for his order to be taken, picked up a copy of a newspaper which

was lying on the table where some earlier diner apparently had left it. In the section devoted to financial news of the day he read an article which said that there were evidences of depression throughout France.

His waiter appearing, the artist ordered his meal and purposely neglected to ask for his bottle of fine wine.

When the waiter expostulated, the artist explained that he would dine without wine as times were hard.

This brought the proprietor to his table with concern written plainly on his usually placid face. Again explaining that he was going without his wine because times were bad, the artist finished his dinner and left the café.

The next day the proprietor of the restaurant visited his tailor and said: "Times are hard and you need not make up that new dinner jacket I ordered."

The day following the tailor countermanded an order he had put in for a new automobile and gave as his reason "hard times."

That night the automobile man met the artist at a social gathering and said: "Business is terrible and I think I shall withdraw that commission for my wife's portrait."

So the artist returned to his studio and as he sat bemoaning his ill luck his eyes fell upon the paper in which he had read the account of financial depression. To his astonishment, he found that it was dated a full three years before.

The following night he ordered rare wine with his evening repast.

The next day the restaurateur ordered a new suit.

The tailor bought a new car and the artist painted the portrait of the automobile man's wife.

Beats statistics, doesn't it? [3]

As the artist, proprietor, tailor, and automobile man were affected by the attitude of each other in this simple cycle, so business men tend to cause the fluctuations in the business cycle by their attitude toward each other. For example, when business is inactive and prices of commodities are low, the shrewd individual realizes that he should buy. Soon others note his optimism and a few more near-optimists also buy. A mild "boom" begins and the more timid then feel safe in buying heavily. When production outruns consumption in several industries, leaders

[3] *The Magazine of Wall Street*, July 16, 1927, p. 485.

note the fact and drop out, and others follow suit, until the shrewd optimist again sees his opportunity. The mere impression that prices will rise causes some men to buy two pairs of shoes rather than one pair. By so doing, the consumers increase demand and prices go higher. Or, if the consumers believe that prices will come down, they tend to wear their old shoes longer and demand is slowed down so that prices tend to become lower.

These attitudes of caution and confidence of the leaders of business soon find expression among the rank and file of workers. When business prosperity is at its peak, jobs are plentiful and laborers are in demand. The workers soon realize that managers are optimistic and will not demand the maximum expenditure of the workers' energies. Workmen also know that the discharged employee can obtain a job elsewhere. Labor, then, becomes less and less productive, until after the peak of the cycle is reached, after which, jobs become scarce and each worker must be exceptionally productive in order to hold his job. Labor's change in productivity is partially indicated in the post-war estimates of the production of bricklayers:

Year	*Rate Per Hour*	*Bricks Per Day*
1909	$0.55	1,100
1916	.65	900
1918	.80	614
1919	1.00	587
1920	1.25	541

While the pay went up from 55 cents to $1.25 an hour, the cost went from $4.40 for the laying of 1,100 bricks to $10.00 for 541 bricks; from $4.00 per thousand to $18.50 per thousand.

Possible threats of normal business growth.—The psychological and economic forces go hand in hand and produce disaster or golden eras. Regardless of the potential wealth of a nation, such as amount of raw materials, peace with foreign countries, climate, geographic location, vigor of its citizens, transportation system, and equipment for production, all these economically potent resources amount to

nothing if the mental state of the people is wrong. The secular trend of business, the curve of normal growth of a prosperous country, can be shattered by an unsound psychological wave among the people. Examples of attitudes that might ruin the prosperity of the United States are unsound economic theories, such as communism, syndicalism, and oppression of labor by capital or government. Cults of self-analysis rather than action, religion of and for a future world rather than for the present life, philosophies of nonresistance and weakness, political theories of exploitation, and the dominant leadership of an ambitious but incompetent head of a government, all these can destroy or halt the prosperity of a country, as forcefully and almost as quickly as a war or a devastating earthquake. At present, the United States enjoys exceptional economic and psychological conditions. One perilous attitude seemed to be gaining a dangerous momentum in 1929, namely, the increasingly large number of persons who preferred to get something for nothing by speculating in stocks. It is true that a certain amount of buying and selling of stocks is essential to the normal functioning of business; but when capital is diverted from legitimate investments that produce economic wealth and is used for excesses in speculation that produce profits through exchange of paper only, then the finely adjusted equilibrium between prosperity and depression becomes unbalanced and unpleasant readjustment follows. In the past few years we have had a decrease in the application of capital to legitimate new enterprises, because money has been diverted to speculation.

Every time that a promoter or "finder" and a banker get together to purchase several corporations for the merging of companies that economically need not be merged, the management of the new merger is forced to drastic acts to produce profits for the new stockholders. Old employees who have given the best years of their lives to the upbuilding of a company are discharged at a moment's notice. Morale among employees is seriously affected or ruined

nowadays by mere rumors of an impending merger, and, when the merger takes place, the employees lose their team spirit and revert to the attitude of the jungle, which is every man for himself and the devil take the hindmost. Instead of a spirit of coöperation among the personnel, we have an attitude of force and stimulation by threat of quick discharge rather than an attitude of friendly analysis and improvement by coöperation. The force and stimulation coming from the upper regions of the management of such an uneconomic merger are bound to break one of the greatest assets of American business, namely, the spirit of its workers. At present, we have not had enough of these mergers to "leaven the lump" of workers; but, unless this tendency is halted by stronger forces of government or economics, we shall have to go through a period of uncertainty and then make a drastic readjustment. If this generation finds that it must go through such a drastic readjustment, it may be and probably will be done by peaceful gradual steps rather than by the kind of paralyzing groping of the Russians. At any rate, we are now on the threshold of possibilities of maladjustment which are as momentous as the time when the leaders of the Russian revolution planned to overthrow the established government. And the real basis for this possibly insidious movement is the speculator who says: "I'll borrow the money to play the market. Even though I divert that money from enterprises that produce real wealth, I shall get mine while I can. I don't care if I do give little or nothing in proportion to what I have received. Then I can live a life of luxury while the employees of the paper-burdened merger try to work hard enough to 'pay the piper.' "

If an excessive percentage of American men and women acquire or pursue this policy, the spirit of our citizens will be broken and a purgative realignment must follow. After all, the real wealth of our country is not in its railroads, buildings, lands, and factories, but in our spiritual stamina; in the attitude toward these resources of the people and

the leaders in business. If the "something for nothing" or "much for little" attitude once motivates too great a part of business and the public, the present almost-ironed-out wave in our general business curve may take a dip that will require the making of new charts for our economic history. The true leaders of business will adopt an unselfish attitude and refuse to merge their companies with other companies, unless there is a sound economic reason for such mergers. They will refuse to take part in mergers, even though they can make a comfortable fortune for themselves and their children. They will refuse to take part in speculative investments, where their profits are not warranted by their contributions to the productive facilities of the companies in which they invest. They will watch the trends of business, study the public attitude toward speculation and a fair day's work for a fair day's pay, and warn their own employees who are infected by the "market" or "street" germ.[4]

Predicting for the particular business.—Because of a boom period in the general condition of business, a company may develop production facilities of greater capacity than the normal market requires. When this occurs, the production executives are apt to say: "Let the sales and advertising departments sell it." To dispose of an exceptionally large volume, the sales department may have to do some frantic selling. Small and unprofitable accounts are opened, easy credit is extended, and goods are shipped on consignment, with the result that the profits at the end of the year may be lower than necessary. Most statisticians agree that it is foolish for an individual company to try to buck the market or the major trends of business. This is most apt to occur when the factory output is enlarged because of a temporary demand, and, after this demand is satisfied, the management continues to produce goods be-

[4] This discussion of mergers does not treat their values from every angle, but merely from some of their psychological aspects. For a more complete summary of the subject, the reader is referred to Crothers, Ralph: "How Successful Are Mergers?" *Printers' Ink Weekly*, Aug. 1, 1929, pp. 133–140.

cause the factory must be kept busy rather than because of definite planning and adaptation to the needs of the market. After all, the determining market factors are the needs and the wants of the consumer rather than the needs and the wants of the producer. It is the problem of the producer, therefore, to study the consumer and base his production and sales plans upon consumers' wishes. The manufacturer must find out what and how much the public wants. The consumers' wants must be predicted and production must be regulated to fit him rather than the producer.

Companies who attempt to forecast sales and govern themselves accordingly usually analyze (1) the secular trend or long-time growth, (2) the seasonal variations, and (3) the effects of booms and depressions. Sales performance is compared with selected barometers, such as bank clearings, amount of electrical energy consumed, prices of farm products, etc. As results of such forecasts, these companies have reduced their inventories and increased the inventory turnover.

General Motors Corporation made statistical analyses and predictions of production and sales for many years, but, in 1924, they inaugurated an analysis of consumer demand. These forecasts have two aspects—the statistical and the constructive. The statistical efforts are directed toward ascertaining the facts bearing upon consumer demand. The constructive efforts are directed toward improving the probabilities. How the forecasting of consumer demand has affected its business is indicated in the following data:

A theoretically perfect coördination of business comprehends an exact knowledge, in advance, of what the public wants (within the limits, of course, of human ability to supply); an exact knowledge of how much the public wants (within the limits of human ability to purchase and consume); and a regulation of production in accordance to fit these ultimate consumer demands for both kind and quantity of goods. If we had this ideal situation, as applied to business generally, we could stop worrying about the business cycle, because there probably would not be any business cycle left to worry about.

Employment.—Systematic forecasting and planning has been a vital factor in the steadier employment of workmen in General Motors. This is shown by the fact that, in 1925, the maximum number of employees was 93,284, the average 83,278, the minimum 68,085. Thus the maximum varied only 12 per cent from the average—an outstanding performance in the corporation's history.

Inventory turnover.—The marked stimulation in inventory turnover, largely as the result of forecasting and planning, is reflected in the fact that the turnover of General Motors for the entire year 1925—6.3 times—represented an improvement of 33 per cent over the best previous year, 1923. An even greater improvement was shown in the turnover of productive inventory (total inventory less finished product), which reached 10.6 for 1925, an increase of 50 per cent over the best previous year.

Dealers' turnover.—The close alignment of current production schedules with the movement of the final product into the hands of consumers has resulted in improving the economic position of the 15,000 dealers in General Motors products through the more rapid turnover of stocks of cars carried by dealers. For example, for the entire United States the turnover of General Motors dealers' new car stocks for 1925 was 12 times, or approximately 25 per cent greater than any previous year.

Our own experience has been such as to lead us to believe that some day American business and industry will approach the ideal of stabilization sufficiently to free us from the bogy of the business cycle . . . intelligent forecasting and planning—vital to industrial prosperity—is the mechanism to bring this about and to remove unnecessary hazards from the course of business.

Effect on new model sales.—In the automotive industry it is said that General Motors puts out no product and makes no changes in models without knowing in advance how the public will accept it. The introduction of the La Salle in March, 1927, resulted in establishing a new high record for the first year sales of any car in its price class. The Pontiac, in the lower-price group, recorded 75,836 sales in 1926, its first year, and jumped to 140,791 the next year. In 1921 General Motors inaugurated its present forecasting policy. In that year Chevrolet

sales were 75,667. In the next year they had jumped to 240,390 and in 1927, 791,870.

The forecasting and planning system in a nutshell.—Forecasting and planning is nothing more nor less than a system of control, whereby production, purchase of materials, and the employment of capital are coördinated with sales requirement. The focal point of the system is the sales outlet. It is a system by which General Motors looks beyond the various units of distribution to the consumer and determines in advance what he wants, how much of it he wants, and what he will pay for it.[5]

In the case of businesses whose prosperity fluctuates with or depends upon crop conditions, it is well to have the government's forecasts of such conditions. The major crops and stocks of the farm can be predicted with unusual accuracy. Insect pests can be forecast, because we know their life cycle and the rate at which they travel. If cotton is going to be poor in South Carolina with a general shortage for the country, except in Texas, then prices will be high and the crop plentiful in Texas. Business men in Texas will be optimistic and will buy. Implement manufacturers who realize these influences govern themselves accordingly and hire extra salesmen to cover the prosperous territories, because customers who are ready and anxious to buy will order from competitors more readily than under ordinary conditions.

Advertising in relation to the business cycle.—When orders are pouring into the factory, but shipments are delayed because of undercapacity, cars are difficult to obtain, and raw materials are hard to get, the manufacturer is apt to look at his appropriation for advertising and wonder whether he should cancel his advertising. Why advertise when the factory is oversold for a year or two in advance? Conversely, when general business is in the doldrums and orders are hard to get, the advertising dollar does not go very far. Expenses must be cut and the boards of directors decide to make a slash in the advertising campaign funds.

[5] Brown, Donaldson: "Forecasting and Planning as a Factor in Stabilizing Industry," *Sales Management*, Feb. 2, 1929, pp. 258, 259.

This kind of thinking seems to have governed the advertising expenditures of American business men, namely, when business is very good, advertising decreases, and when business is very poor, advertising decreases. In either of the extreme periods, when orders are being thrust upon the manufacturer or when orders are obtained only with extreme difficulty, the management tends to decrease the

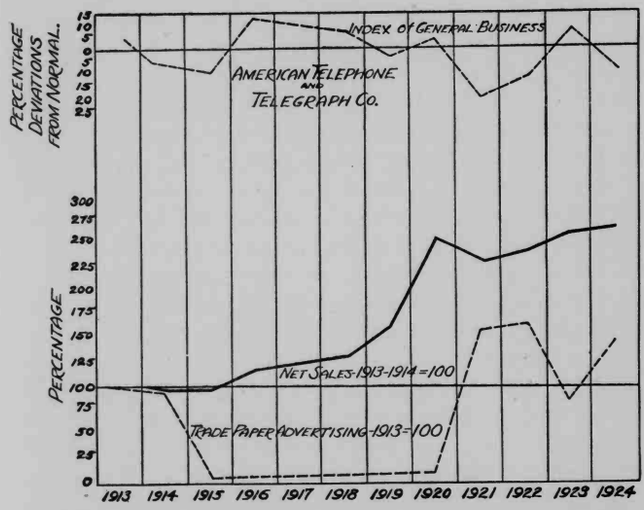

Fig. 46—Chart of advertising activity of the Dennison Manufacturing Company. The advertising expenditure is charted against the company's sales and an index of general business. In general, the company tries to advertise more during the periods of depression than during the periods of prosperity when orders are easily obtained.

advertising. Obviously, the advertising appropriation should rise as the business curve dips and thus help to bring in orders. To do this, funds must be established during times of prosperity to supply the ammunition for periods of depression and sales resistance. A few of the most progressive concerns have adjusted their advertising expenditures to fluctuate contrary to the business curve;

that is, periods of prosperity have less advertising and then money is set aside for additional effort during adversity. Several factors make it difficult for an advertiser to adjust himself in this way to the fluctuations of business. These factors are the inflexibility of rates for magazine and other periodical advertising and the psychology of the advertiser. The business manager who is having a period of prosperity with profits rolling in very satisfactorily is inclined to expect and hope that orders will continue to be received indefinitely. He thinks that his goods and services are so excellent that his customers will want to buy from him perpetually. And then, when the depression does come, he prefers to hold his cash, for he has no assurance that additional advertising will produce the desired sales.

Advertising in a time of prosperity is like buying life insurance when in a state of excellent health. When the depression comes, the dealer and the consumer will turn to those brands which they know by trade-mark. Continuity in advertising is essential in periods of low sales resistance, so that the times of adversity will find the advertiser intrenched in the customers' minds. Experience indicates that the nearer a company's products are to the consumer and the more strongly the brands are fixed in the public mind, the less subject is the company to the influence of the fluctuations in the business cycle. Advertisers find it easier to forge ahead during depressions than at other times because competitors are inactive. Advertised products maintain a uniform demand and flow more evenly through the channels of distribution in a period of depression than do the less known articles.

Leveling down the seasonal fluctuations in sales.—One of the main causes of heavy sales in one season and low sales in another season of the year is psychological in nature, namely, the habit of booking orders certain months in advance of needs. If the product is in process of manufacture for several months or years, advance orders are essential. In many fashion products, such as clothing, the

advance habit still prevails. This is true, in spite of the fact that it is exceedingly difficult to forecast the public's style preferences with certainty. The manufacturer who forecasts his production merely on the basis of orders placed six months or more in advance may misjudge the trend of demand upon his manufacturing facilities and the public fashion. Such a firm is running the risk of large inventories. In 1922 the Gotham Silk Hosiery Company found themselves oversold six months in advance. It was then decided to adopt a hand-to-mouth policy and accept no advance orders from any one. Orders received during one day are now in process of transit on the same or the following day. The average retailer obtains a stock turnover in hosiery from four to six times per year. With the hand-to-mouth method of distribution of this company, the turnover of some dealers is twenty times per year. Inasmuch as the company's terms are thirty days, the dealer usually has the stock sold before he must make payment. The company's turnover on its inventory of finished merchandise is twenty-eight to thirty times, or, in terms of the stock room, it turns itself every ten days. With this arrangement the merchant has complete stocks but not large stocks. Careful statistical records have been kept, so that the company can estimate demand for a year as well as the months of the year. In each month, the company will ship the following parts of the total year's sales [6]:

January	5.6%	July	6.5%
February	6.2	August	6.4
March	8.0	September	7.9
April	8.1	October	9.3
May	7.8	November	11.2
June	8.8	December	14.2

The system of the Gotham mills does not eliminate the problem of seasonal fluctuations entirely, but it does reduce some of the uncertainty involved in the effects of the fluctuations upon inventory and sales of a fashion product.

[6] Tilles, Roy E.: "Gotham's Successful Method of Hand-to-Mouth Selling," *Printers' Ink Weekly*, Dec. 22, 1927, p. 33 ff.

With the aid of accurate predictions of monthly demand, it is often possible to adjust the operations of the company to a better degree of net profit than without the aid of forecast records.

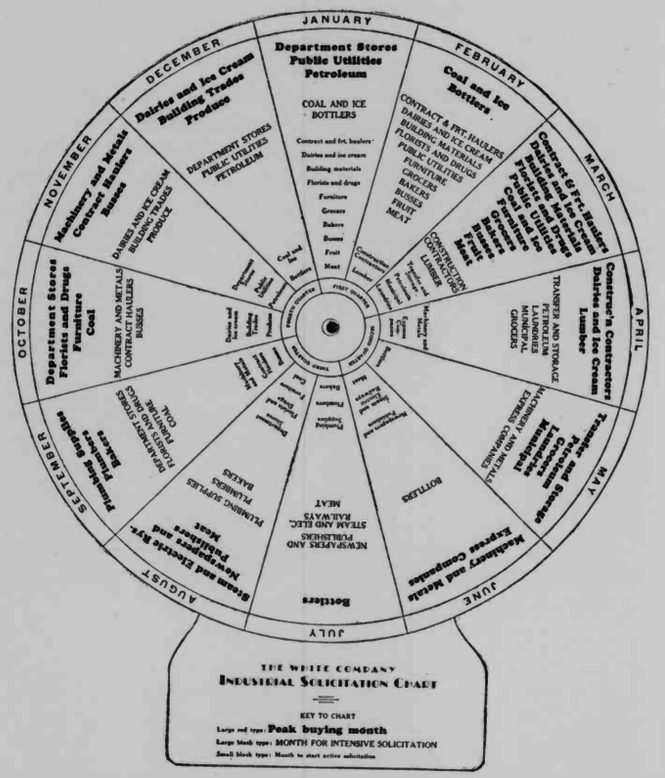

Fig. 47—This peak season chart was made from a study of monthly sales records of the White Company by districts, product models, and line of business of buyers. Because of the necessity of making careful preparation before calling on prospects in any given industry, this solicitation plan has proved particularly helpful.—*From Saunders Jones, "Every Industrial Market Has Its Peak Season—Cash In on It," Sales Management, June 22, 1929, p. 585 ff. Reproduced by courtesy of the White Company.*

A policy of hand-to-mouth buying might help to level the seasonal peaks and valleys in some industries and increase them in others. Another radical step in company policy to reduce the oscillations of the sales curve is that of changing the fiscal year so that it will end just before the end of the dull season. If the fiscal year is the same as the calendar year, the company may find that the seasonal slump takes place in summer and the concentrated drive of the salesmen is made at the time when orders are easy to get. Salesmen like to end the year's record with one last effort to put over the best volume of any previous year. If this drive takes place in the dull season, so much the better for the destruction of the usual slump.

Similarly, many sales conventions are held at the beginning of the best season of the year rather than at the beginning of the poorest season. The convention stimulates the salesmen at the time when they need the least amount of enthusiasm and energy. The quotas of the salesmen should also be on a monthly or a semimonthly basis, in order that they will know just exactly what they are supposed to produce each month rather than have a quota that is easy of attainment in the easy months and impossible in the difficult months.

Most efforts to overcome seasonal variations are directed toward the salesmen in the form of sales contests, extra bonuses for orders in dull periods, favorable dating for the dealer, or special price concessions. All these methods have their place in the desire to level the seasons, and it must be kept in mind that pushing on the salesmen is of slight avail unless the buyers are given some selfish reason for ordering. Few people can be induced to part with their money for coal in the spring of the year unless they are given an inducement that appeals to them. In some cases, the product can be connected with a premium that fits the season. A certain company, whose dull season is in December, obtained some orders by giving a package of

Christmas cards with each order. In any seasonal problem in distribution, it is necessary to educate the three factors in the chain: the salesmen, the dealers, and the customers or consumers. Each must be given a real motive for working or ordering. If the dealer claims that the product will not sell in a certain month, the manufacturer must supply him with additional help to move the goods, such as window trims, training of sales clerks, or dealer's helps. "Talking at" the dealer without showing him why he should order and how he may dispose of the goods in a reasonable length of time may be successful temporarily, but it is poor policy. The company that starts on a campaign of selling in dull seasons must carry the study farther than the sales contest; the salesmen must have the necessary ammunition to move the goods off the shelves.

The product can be studied also for its new uses that fit the dull season. Cocoa was a winter drink until some of the manufacturers decided that it was just as good as a summer drink. The manufacturers, the dealers, the salesmen, and the public often acquire seasonal prejudices or traditions which have no sound basis. Pancakes can be eaten in summer as well as in winter, but most housewives are in the habit of making them in the winter only. To break down seasonal habits on the part of consumer and dealer requires special effort and additional advertising expenditure. Sometimes a company decides to destroy these seasonal dips in the sales curve and does level the curve to some extent only to find that the cost destroys the profits of the lucrative months. After all, net profit is the main aim of business, and, if the net profit is greater with a dull season, why try to level the peaks and the valleys? Of course, the "rush" season cannot be taken for granted. When a sales organization expects a rush, they sit back and wait for the orders to come in. The surest way to have a rush is for the salesmen and all other employees of the company to do the rushing.

Projects.

1. What is the effect upon business of the failure of one or several financial houses during the downward movement of the business cycle?

2. Airplane and some other stocks have been sold at from twenty to forty times their income value. How long can such speculations continue? What effect does speculation have upon advertising?

3. Why is it difficult for coal dealers to sell coal in the spring and summer?

4. Collect a list of the various barometers of business conditions. Which are most susceptible to psychological influences?

5. In the 1928 presidential election, Mr. Hoover received 59 per cent of the total votes cast. Mr. Smith received 40.3 per cent. In the preëlection *Literary Digest* poll, the voters gave Hoover 63.2 and Smith 35.7 per cent of the votes. Do you consider this an accurate forecast? What are the values and effects of such straw votes?

6. When the management of a manufacturing concern finds that all the forecasters predict a serious slump in that industry, should the company plan to inaugurate new methods of distribution, such as the opening of manufacturers' retail stores? How long should the management wait before a new plan of distribution is attempted? What research investigations should precede the new system of selling?

7. Would it be desirable to iron out all the fluctuations in the curve of business prosperity and depression?

Part V

INFLUENCING THE BEHAVIOR OF THE GROUP

Chapter XVII

The Executive and Public Good Will

Measuring consumer good will.—Good will in business is a vague and ephemeral business asset. The founder of a business may consider the good will of his firm of greater commercial value than the equipment of his factory. The banker usually finds good will difficult to evaluate and so he credits the firm with one dollar for its value. The accountant may consider it only when the business is sold and it is found that the amount received is greater than the tangible assets. Some appraise it at from seven to fifteen times the average annual net profits. No one has ever found a satisfactory method of measuring good will. The method satisfactory to the accountant is quite unsatisfactory to the head of a business, when he does not contemplate the sale of the business.

The writer has used the "method of impressions" as a scheme for measuring good will. This method simply refers to the recording of the "likes" and "dislikes" which people have toward some one thing, institution, or corporation. The advertisers have been using similar methods in planning their advertising campaigns. Every person uses this method each day when he says to himself: "I like the Blank Company because it gave me prompt service," or "I certainly won't buy any more goods from that crabby sales girl," etc. We all know that we have these reactions every day, and the company that can find out how many people and which people are expressing pleasant or unpleasant feelings toward them will be in a position to correct wrong feeling-tones or to capitalize on good feelings which the public may have toward the concern.

A Syracuse, New York, business concern wished to find

out the attitude of its customers toward the company. This method of impression was suggested and a form to be filled in by the customers of the company was prepared. In this case the customers of the company all lived in the city and could be reached by interviewers without difficulty. The persons interviewed knew the general purpose of the experiment, but they did not know which concern was being studied. If the interviewer found that the customer had not lived in the city five or more years, he was not asked to answer.

When an interviewer approached a customer, he said: "We are conducting an experiment in the measurement of good will. Whenever you hear or think of anything, you tend to have a certain feeling-tone in your mind. For example: if you are hungry and a tender, juicy steak is set before you to appease your hunger, a pleasant feeling-tone will be aroused. On the other hand, if some one annoys you or makes you angry, an unpleasant feeling will be aroused. In fact, no matter what you think of, a *pleasant*, an *unpleasant*, or a *neutral* feeling will be aroused. I am going to give you a list of words and you are to indicate the feeling that is aroused when you think of these things. State whether your feeling in regard to each of these things or business concerns is (1) annoying or disgusting; (2) slightly unpleasant; (3) neutral; (4) slightly pleasant or pleasant; (5) very pleasant."

The customer was then given a list of firms and institutions of the city to check the degree of his feelings in one of the five conditions described above. If a concern or institution was rated in condition 1, the rating was given a numerical value of 1; if rated in condition 5, the quantitative value was 5; and so for each of the five grades or degrees of feeling. The average feeling-tone reactions for each institution are shown in the table for 323 persons.

In order to secure a wide range of feeling-tone, certain highly pleasing or decidedly displeasing things were included in the list. In the original survey the customers were, of course, given the real name of each business concern. For obvious reasons, the names of the corporations investigated have been disguised in the data presented here.

TABLE XXXVIII

RESULTS OF A GOOD WILL SURVEY OF FIRMS AND INSTITUTIONS IN ONE CITY

	Average
Favorable:	
Onondaga Park	4.31
A Certain Hotel	4.25
Theater A	4.19
A Certain Car	4.18
A Newspaper	4.06
Theater B	4.04
Department Store A	4.02
Syracuse University	3.92
A Certain Washer	3.73
The State Fair	3.71
A Certain Store	3.70
Radio Station A	3.58
Radio Station B	3.53
Public Utility A	3.42
Department Store B	3.39
Traffic Signals	3.15
A Certain Taxi Company	3.09
Neutral Point	3.00
Unfavorable:	
A Certain Restaurant	2.86
City Street Paving	2.40
A Sooty Suburb	2.34
Syracuse Weather	2.28
A Certain Factory	2.10
The Morgue	2.04
Public Utility B	1.97
City Garbage Wagon	1.67

Certain facts of this survey must be given proper emphasis. A corporation might have a low rating in good will when measured by such a scheme and still make money. The company might have a monopoly, but in such a case the public would try to find substitutes for the company's product or service. This is exactly what has taken place in one concern that made a low rating in this survey.

Again, a large percentage of the public might dislike a certain concern, but a small segment of the population might like the company and give it profitable patronage.

Some things, by their nature, arouse unpleasant feelings, but we might want them to remain as they are. The morgue is an example.

The chief practical value of this scheme of measurement of good will might be in situations where a given concern has a poor reputation with the public or possible customers and wishes to correct the condition. An intensive campaign of advertising or special service might be launched against the ill will for the purpose of building up good will. If this kind of an investigation were made before and after the campaign, a definite quantitative change should be found.

Another value in such a survey of feeling-tone might be found in the fact that most executives of a concern find it difficult to discover the true attitude of the public toward the company. The friends of the executive may flatter him when they praise his concern. The complainers may express themselves so frankly that the management develops a distorted view of the institution.

Such data can also be used effectively in convincing the discouraged salesman that his house ranks very favorably in the minds of the public when compared with competing concerns.

The question may well be asked: "Does the feeling-tone one has toward a firm affect one's conduct toward that concern?" Psychologists agree that it does. The things toward which we have an unpleasant feeling, we avoid. In like manner, we are attracted toward those things or persons who arouse pleasant feelings.

Methods of increasing customer good will.—When a corporation finds that it is in need of greater good will, the management may approach the problem by the direct methods of advertising and better service or by indirect methods of the propaganda variety. We shall limit our discussion to the direct methods.

Institutional advertising does not refer to the lauding of the founders of the business, eulogizing the leading executives, nor quoting the statistics of the extent of plant acreage, miles of conveyors, number of employees, and size of the pay roll. It does not laud, defend, or praise the company. Institutional advertising is telling the public in an interesting way of how the corporation is rendering very valuable services of direct benefit to the people. It shows why and how the institution operates for the giving of service in return for a fair profit. Some firms prefer to call this educational advertising. An excellent example of institutional advertising of this type is that of the American Telephone and Telegraph Company. This advertising explains and illustrates how the company meets emergencies, develops new inventions for rendering service, and praises the loyalty of the employees, many of whom also happen to be stockholders. The Metropolitan Life Insurance Company does not attempt to frighten people into buying insurance, but concentrates upon prolonging life and increasing happiness. They even went so far as to advise the holders of the government War Risk insurance to continue to keep their policies in force. This was especially magnanimous, as they might have spent that advertising money in telling people to buy Metropolitan insurance.

Public utilities and other concerns that have a monopoly of their markets have found it necessary to advertise their good works and services. A generation ago the railroads were in bad repute. High school pupils debated the question of government ownership and farmers blamed the railroads for their troubles. Gas and electric companies have been described as cold-blooded machines that hold the public in their none too gentle grip. They have found that it pays to explain how the meter reader does his work and how the bills are figured so that the customer gets what he pays for. They also explain the advantages of having one large company under the control of the public for the giving of light and gas service rather than a number of small competitive concerns. They frankly state that they want the confidence of the public and that without it they cannot succeed. One public utility, a street railway, requires all its various dis-

trict executives to clip the newspaper articles relative to the company. These are sent to the president each day and he takes prompt action in giving the public the correct information in a friendly and sincere manner rather than in the form of threatening publishers or witnesses with court actions. In this way, real or fancied grievances are adjusted and waves of indignation are avoided.

When a company without a monopoly finds that it has become the leader in its field, the men in the advertising department are apt to direct their copy into the leadership variety. They state that the company is the leader and has an enviable reputation. A better method is to show why and how the company developed its leadership. A reputation that was built upon excellent performance ten years ago is not impressive to to-day's readers. Institutional advertising should deal with topics of current interest and contemporary performances.

Some of the professional groups have found it helpful to do educational advertising because of the public's prejudices. If we ask our friends which of all classes of business that they patronize are the hardest to deal with, we are likely to have mentioned real estate dealers, second mortgage firms, lawyers, printers, pawnbrokers, employment agencies, garages, and many others. Most of these workers and firms are trying to render an honest service, but the public does not understand the nature of their services and so tends to misjudge the facts. A systematic campaign of education would help to decrease the number and intensity of their complaints.

"Friendly advertising but cold and poor service" is what the customer often thinks when he reads a cheerful advertisement and then visits or writes the advertiser. If he visits the store or office that advertises its helpfulness, he may find that the "goddess at the information desk" greets him with an icy stare which plainly shows that she is bored at the intrusion. Sometimes the visitor may get past the information desk to the executive who would be the logical

person with whom to discuss a service advertised, only to find that the executive knows nothing of the advertisement. Similarly, inquiries of national advertising are treated in as cold a manner as the personal caller by certain firms that have hired advertising agencies who are full of human kindness but weak in organizing their replies to the people who answer the advertising.

Some progressive firms are tearing out their old reception room partitions with the small circular hole in the glass and are placing a friendly, smiling girl at a desk where she can greet the caller in a less formal manner. In such progressive firms, when a caller telephones the company and asks for an appointment, the operator-information clerk asks: "Do you know how to get here?" If the caller does not, she tells him the street car to take or explains the shortest auto route. Several beverage and food companies have a well-furnished reception room where the visitor is asked to sample the product. In some offices, the customer who comes in at half-past five when the office is closing is not told curtly to come some other time, and when the caller comes to the desk of the executive he may find a sign which says: "We try to be just as friendly as our advertising says we are. If we are not, help us to correct our attitude." A storage and transfer company even put their friendly signs on the back of their trucks: *"The Wonder Transfer Company wishes to extend the courtesy of the road. Blow your horn. When you need us, telephone* 3-2657."

The attitude and manner of the executives in the upper strata of management have a definite bearing upon the cordiality of the employees who meet the public. The presidents and managers who are noted for their coldness should not expect their office boys and clerks to be more cordial than themselves. Nor should they be disappointed if an able advertising agency obtains a large volume of inquiries and few sales result from their advertising.

Selling stock to the public is one of the most commonly used attempts to gain public good will. When Henry Ford

wished to inaugurate the new Ford Motor Company, Ltd., of England, he requested that small British investors should be favored. A few of the larger corporations that have an unusually wide distribution of stock [1] are:

	Number of stockholders
American Telephone and Telegraph	384,000
General Motors	80,000
General Electric	46,000
International Harvester	29,000
Westinghouse Electric & Mfg.	24,000
Anaconda	20,000

Many corporations find it helpful to keep in touch with, and to tell, their stockholders about the plans and policies of the management.

In the annual report for the General Motors Corporation for 1928 the following statement was made on the relation of good will to the balance sheet: "Irrespective of how impressive the balance sheet may be, the intangible item of the good will of the public toward the corporation, its policies, and its products is of incalculably greater value. That principle is fully recognized and the policy will continue to be to conduct the operations of the corporation with a view to increasing the value of this most important asset. . . . While fully recognizing the importance of constructive decisions on the many daily problems that present themselves, consideration is at all times being given to the fact that the business must go forward; and that, however effectively to-day's task may be accomplished, a better result is essential to-morrow if continued progress is to be recorded." [2]

A generation ago a company issued a formal and uninteresting statement of its assets and liabilities. To-day, many companies include pages of descriptive matter relative to the achievements and future plans of the management. New stockholders are sent a cordial letter of welcome with a detailed statement of facts that may interest them. It is

[1] *Printers' Ink Weekly*, June 28, 1928, p. 19.
[2] *Printers' Ink Weekly*, June 13, 1929, p. 28.

necessary to point out that certain dangers may be involved when stockholders are given too frequent reports of earnings. Variations in seasonal demand and changes in general business conditions may be misleading to the stockholders who are not well acquainted with the problems and policies of management. Nor does a company have the right to divert a large amount of money from the advertising appropriation, which should be spent for consumer advertising. After all, the company must make its money by selling the product to the customers rather than to the stockholders. Stockholder advertising must keep in the background in comparison with the publicity for regular channels of distribution.

Professional schools are conducted by a few corporations, such as the Eastman Kodak Company's School of Professional Photography. Some of our large electrical manufacturing companies maintain technical schools for training young engineers. When these engineers leave, as many of them do, to take executive positions with other types of electrical firms, such as power plants, they naturally recommend the purchase of equipment with which they are familiar, and thus bring business to their former employers.

Advertising in philanthropic mediums is supposed to build good will and often does so, but it is seldom that the returns justify the expenditure. Every concern that deals with the general public is apt to be called upon daily by the representatives of various charitable and semi-charitable institutions, such as churches, fraternal orders, hospitals, guilds, labor unions, high school and college year books, bigger and better home-town newspaper supplements, etc. The solicitors claim that, if the firm refuses to advertise in their program or periodical, they and their families will withdraw their accounts and induce their members to do likewise. Many retail concerns would be unable to do any legitimate advertising if they accepted every opportunity of this kind. Some avoid giving offense by taking membership in a commercial organization and obligating themselves not

to advertise in mediums of this type unless the advertising is first approved by a central committee. The solicitors seldom obtain such approval and the advertisers are relieved of the obligation. It is very important, however, for the business concern to interview these solicitors in a courteous manner. The abruptness of the refusal may cause more harm than the refusal itself, because these solicitors are not, as a rule, experienced in selling advertising and are more sensitive to failure than regular solicitors.

Salesmen with a high standard of integrity for themselves, their company, and the goods they sell, are important factors in building up and maintaining good will. Unhappy and dissatisfied salesmen unconsciously break down good will for the house. Such men do not follow up complaints of customers, nor do they hesitate to overstate the qualities of the product in order to make a sale. They may offer special discounts and dating. Many sales managers are troubled with the men who forge signatures on orders. Sending a cub salesman into the field under the instruction of an older man tends to teach the youngster the "tricks" of the star salesman. Some of these star salesmen are kept on the force in spite of the fact that the manager knows that they do resort to tricky selling occasionally. Their volume of sales may permit them to remain indefinitely. Another problem in good will for the sales manager is that of changing the salesmen from one territory to another. The constant switching of salesmen to other territories does not improve the good will for the employer, as customers prefer to deal with men whom they have known for a long period of time.

Guaranties of merchandise play some part in the good will of the customers. Sometimes the copy writer of the advertising allows his enthusiasm to exaggerate the wearing quality or uses of the product. The customers then interpret the superlative advertising as a guaranty and demand adjustments that cannot be fulfilled by the manufacturer. Super-advertising and ambiguous statements in copy are

dangerous. An example is that of a manufacturer of nationally advertised rugs who made his rugs from old clothes sent him by the customer. He stated that his rugs were guaranteed and that, if they proved unsatisfactory, he would pay the customer six cents per pound for the old clothes sent him. One customer sent him several hundred pounds of old clothes in the expectation of having a number of large rugs made. However, the first two rugs received were unsatisfactory and the customer requested the return of the old clothes shipped or the expected six cents per pound. The manufacturer refused to return the clothes or to pay for them. The customer's interpretation of the advertiser's guaranty was quite different from the advertiser's interpretation. This manufacturer should have stated his guaranty so plainly that any normal customer would have understood its meaning.

Another manufacturer advertised a free booklet and then sent the inquirers a large folder. The title of the advertised booklet suggested that it would be of intrinsic worth rather than mere advertising. Naturally, the inquirers were disappointed. When booklets are offered to readers of magazines, their real nature should be indicated. If they are filled with advertising, the reader of the magazine advertisement should be able to infer that from the advertising.

The word "guaranteed" has lost its power in modern advertising. When the guaranty is featured in advertising, the copy should state definitely the nature of the guaranty. The price tag or a certificate on the article should specify what the maker does and does not guarantee. In most cases, a nationally advertised trade-mark has more value than an indefinite guaranty. The public infers that all advertised high-grade articles are guaranteed, and most manufacturers of worthy articles try to merit such confidence. They maintain systems of thorough inspection so that complaints are kept at a minimum. Manufacturers who place a great deal of emphasis on the guaranty tend to grow careless in their inspection methods and depend upon

the guaranty to satisfy the purchasers of defective articles. When the manufacturer does feature his guaranty, it tends to attract the few chronic and fake complainers who take unfair advantage of the offer. The makers of Holeproof hosiery spent thousands of dollars in advertising their guaranty, but found that it was better to discontinue the guaranty and gradually direct their sales efforts to a new brand.

Special service bureaus are used to develop good will. Newspapers and magazines give special attention to services which increase their prestige and circulation. In 1928, readers in the Chicago territory wrote 632,011 letters to the *Chicago Tribune*. Of this total more than 275,000 were from women readers who wrote for information, advice, and aid. The Standard Oil Company of New York distributes road maps of "Soconyland." In 1929, the company printed 5,000,000 of these maps for distribution to motorists. In 1926, the touring bureau answered 14,000 inquiries; in 1927, it jumped to 67,000; and, in 1928, to 90,000. The estimate for 1929 was 130,000.

The gas and electric company of one city inaugurated an exceptionally broad service bureau for their customers, wherein they asked the public to consult them whenever anything went wrong with the service or appliances in the home. After the service had been advertised and rendered for two years, a cross section of the population was interviewed and asked whether they knew about the company's special services. The survey proved that 45 per cent of the consumers had become acquainted with the special advertised service.

The *Seal of Approval* of a well-established magazine is valuable as a form of guaranty and good will. At least 381 manufacturers of household devices and equipment used 87,111,232 Seals of Approval of the Good Housekeeping Institute. The Maytag Company had an annual sales volume of $50,000,000 and believed that it needed no indorsement beyond that of its many satisfied users. It discontinued the use of the Good Housekeeping Seal of Approval, but found that it was overlooking a source of good will. Ray A. Bradt, Vice President of the Maytag Company, stated in a letter, dated May 10, 1928:[3]

We had discarded the use of the Seal of Approval of Good Housekeeping Institute for the reason that we felt there were getting to be so many institutes and testing plants that it no longer carried very much weight with the consumer. We also felt that the name Maytag was carrying enough weight so that it would stand alone without outside indorsement.

We hadn't withdrawn the seals from the field many months before inquiries were made about it by a few dealers. We also had inquiries from our sales organization. These inquiries increased at a surprising rate. Dealers claimed that housewives were skeptical about a washer which had not received Good Housekeeping Seal of Approval. Housewives asked our door-to-door salesmen why the Maytag did not carry the Good Housekeeping approval.

The result was that, in a period of practically one year from the date they were discontinued, they were put back into the field again and offered to dealers along with duplicate certificates of approval by Good Housekeeping Institute. We have been making use of the Seal ever since and we know that it has been a very important factor in helping a great many housewives decide on the Maytag.

Complaints of customers may be looked upon as sources of irritation or as opportunities to cement the customer to the company. Several studies have been made of reasons why customers discontinue dealing with retail concerns. According to Ben C. Pittsford, investigation reveals that, for every 100 nonbuying customers,

1 is either dead or unaccounted for;
5 are influenced to trade elsewhere by friends;
14 have unadjusted grievances (real or imaginary);
3 have moved beyond the concern's trading zone;
9 buy elsewhere because of price inducement;
68 drift away because of concern's indifference!

[3] From an advertisement of *Good Housekeeping Magazine*, in *Sales Management and Advertisers' Weekly*, June 9, 1928.

Think of it! 68 out of 100 customers are lost, because no effort has been made to keep them!

Concerns will spend any amount of money to get new accounts on their books, but they won't spend one-fifth of the amount to keep them there.

This is the most illogical thing in business.

A questionnaire was sent to former patrons of a furniture store, asking them why they had stopped buying. The answers were:[4]

TABLE XXXIX

	Per Cent
Indifference of sales people	24.4
Errors in service	9.3
Forcing of substitutes	9.3
Tricky methods	9.3
Delays in delivery	8.8
Overinsistence of sales people	8.3
Discourteous treatment	7.2
Delay in giving attention	6.7
Tactless handling of customers	5.7
Disorderly stock	4.6
Ignorance concerning goods	3.1
Unwillingness to exchange purchases	2.0
Dissatisfaction with quality	.5

According to the S. D. Warren Company, 87 per cent of lost customers drift away, because of fancied grievances, because friends induce them to buy elsewhere, and because of store indifference towards them.[5]

Many persons who do have a legitimate complaint attempt to find the proper person with whom to register the complaint and from whom to obtain an adjustment, but the difficulty of finding such a person in a large office or in scattered offices of a large building is too great to overcome.

To correct the complaints that are made articulate, many companies have a complaint or an adjustment bureau that knows the policy of the firm with regard to adjustments. The customer is not required to find his way to the head of

[4] Adapted from an article by B. J. Munchweiler in the *Furniture World* and published in *Michigan Manufacturer and Financial Record*, Dec. 5, 1923.

[5] From an advertisement of S. D. Warren Co., 101 Milk Street, Boston, Mass., published in *Saturday Evening Post*, May 7, 1927, p. 249.

the department that may have made the mistake, only to find that he is too busy to listen to a "kick." Firms that do not have such a complaint department never learn about the attitude of many lost customers, nor do they keep records of the number and kinds of complaints. With one person or department responsible for the adjustment of all complaints, definite records are kept and prompt adjustments may be made. Some firms even go so far as to invite complaints by direct mail or by other advertising. It is probable that, for every customer who complains, there are ten who do not mention their grievance but go elsewhere for their purchases. The centralized complaint bureau hears all complaints and can collect the information that will answer and prevent some complaints. For example: lighting companies find that their consumers complain of excessive bills during months having cloudy days and short days. By tabulating the number of dark hours of the months, it is possible satisfactorily to explain to an irate customer why her bill is a dollar more for a certain month, in spite of the fact that she was away for three days of the month.

Some firms have adopted the slogan, "The customer is always right." This may be satisfactory for firms whose products have unusual endurance qualities and can stand abuse. A hose and rubber manufacturing company has even allowed the customer to specify the actual amount that he wishes, in order to settle the matter satisfactorily to himself. Under the former system of demands on the part of the customer and argument by the manufacturer, the customer usually asked for twice as much as he expected to get. The adjustment of the difference became a kind of poker game. Jobbers who bought large quantities in the past asked for an excessive amount, because they knew the manufacturer would go the limit in making an adjustment rather than lose the account. Under the new system of putting the whole decision up to the customer, the customers tend to lean backward in their demands. Much unpleasant correspondence has been eliminated. In 1925,

the first full year of the new policy, the amount of all adjustments dropped. The figures [6] for several years are:

TABLE XL

AMOUNT OF ADJUSTMENTS FROM ALL CAUSES

Before 1924	.66 of 1% to 1%
1925	.25 of 1%
1926	.38 of 1%
1927	.16 of 1%
1928 (estimated)	.20 of 1%

However, it is doubtful whether all companies could adopt so generous a policy of adjustment. Some products, such as watches, are by nature delicate in construction and the customer may not be aware of the manner in which he himself has abused the article. Unfair demands may be made by him against the manufacturer or the seller. The fact that the customer is right does not mean that the company is wrong. The seller should stand back of his merchandise and prove to the customer that it merits his respect. The customer who wants to be reasonable should be willing to pay for the length of time the article has given service.

Some customers do not have sufficient intelligence to appreciate fairness. The following letter was taken at random from the files of one adjustment clerk who kept a collection of unfair claims:

> We are living in hopes that you
> People had outgrown the dirty streak
> in business but this past week had
> hopes crushed, for up you pop at the first
> opportunity—offensive as ever—couldn't use
> the phone—had to be dirty—I refer to a
> returned check—would say your collection
> manager lacks the first elements of courtesy
> or common sense—Rather create ill feeling
> than good.
> Thanking you for the dirty treatment. (sic)

Letters in answer to complaints should be handled by the

[6] Garretson, C. D.: "Why We Have No More Adjustment Squabbles," *Sales Management and Advertisers' Weekly*, Nov. 17, 1928, p. 420 ff.

centralized adjustment bureau. The correspondents who are members of such a department will be more competent to answer written complaints than the department head who is merely annoyed by them but interested in his production or sales problems. The live executives of a company are apt to argue with the dissatisfied customers rather than attempt to reach a mutually satisfactory adjustment. The trained adjustment correspondent who answers the disgruntled customer must be a diplomat and willing to write letters that are long enough to explain all the facts in the situation. His aim should be to sell the company to the customer as a direct result of the manner in which his complaint is adjusted. He should attempt to prove the basic quality of the service and goods that he complained about. He should not be considered the company's official apologizer, but one of their salesmen. Moreover, he can prove his worth as a salesman if he keeps a record of the sales that he makes as the result of his correspondence with the firm's critics.

Returned goods may become a menace to the success of a business as well as afford opportunity for good will. The Bureau of Business Research, Ohio State University, made a study of this problem for the state of Ohio. They found that merchandise returns averaged 4.3 per cent of the sales. A study was made of 66,154 returns as to why they came back:

TABLE XLI

Reasons	*Value of Returns*	*Number of Returns*	*Average Value*
Customer's change of mind	$140,213.93	17,157	$ 8.17
Sent on approval	103,771.86	8,382	12.38
Wrong size asked for by customer	78,627.09	18,057	4.35
No reason stated	39,259.54	4,414	8.89
Other reasons	26,667.92	4,445	6.00
Wrong color	17,533.31	4,103	4.27
Wrong size sold (store's error)	10,328.30	1,678	6.16
Other imperfections	8,912.51	1,602	5.56
Unclaimed ("will call")	8,784.22	730	12.03
Customer's mistake in ordering	3,762.43	1,800	2.09
Tearing	3,710.84	728	5.10

TABLE XLI *(Continued)*

Reasons	*Value of Returns*	*Number of Returns*	*Average Value*
Fading	3,060.14	464	6.60
Delivered damaged	3,015.12	660	4.57
Wrong size marked	2,224.68	493	4.51
Delayed delivery	2,148.88	317	6.78
Ripping	2,038.01	519	3.93
Spotting	1,118.16	116	9.64
Shrinking	853.60	95	8.99
Over or undershipped	596.32	263	2.27
Wrong address	434.13	82	5.29
Stretching	285.68	49	5.83

The economic waste incident to merchandise returns was partially summarized as follows:

Ohio department stores had sales of $251,100,000 and returns of $10,797,000 in 1927. All retail sales in Ohio were $1,721,-100,000 and returns were $74,000,000 for the same period.

In 1927, there were approximately 1,500,000 returns to department stores, and 11,000,000 returns to all retail stores in the state.

In all retail stores in Ohio, a sum of approximately $1,500,000 must be financed continuously in order to provide customers with the privilege of returning their purchases. More than $200,000 is required to finance department store returns alone.

Reduced turnover, ineffective stock control systems, and actual expenditures in selling expenses, supplies, office expenses, and delivery expenses are items in the cost of returns which the store must assume or shift to the customer.[7]

The Domestic Commerce Division obtained figures from 440 department stores, on percentages of returns and allowances on cash, open credit, and installment sales. Returns and allowances reported by these stores, most of whom probably included repossessions under returns, totaled 6.8 per cent of cash sales, 21.1 per cent of open credit sales, and 12 per cent of installment sales. Stores with an annual volume of $1,000,000 to $9,999,000 showed the highest percentage of returns and allowances on open credit sales, 25.7 per cent, followed by stores with sales over $20,000,000,

[7] Grinstead, L. H.: "$1,602,000,000 Worth of Goods Are Returned Every Year," *Retail Ledger*, Second February Issue, 1929, p. 3.

21.1 per cent. Only 2.2 per cent of returns and allowances on open credit sales were reported by stores with sales under $100,000, 9.9 per cent by stores with sales between $100,000 and $999,000, and 14.4 per cent for those with a volume of $10,000,000 and over.[8]

The causes of returned merchandise are varied and well known. In retail selling, some reasons are the desire to exchange wedding gifts or Christmas gifts, and an inexplicable change of mind on the part of some purchasers. In specialty manufacturing concerns, the salesman may be told to get orders and to get them at any cost. Excuses are not accepted. Managers tell the salesman to load up the dealer, so that he will have to push the goods in order to get his money back. If the dealer "howls" loud enough, the manufacturer or jobber may give him some advertising or sales helps to assist him. When the dealer asks the salesman about returning excess stock, the salesman is apt to say: "Well, we do accept some returned goods. If you should happen to have some left over, I'll see about it." The dealer is likely to consider such an evasive statement as a promise to take back the goods. If salesmen are properly trained in answering questions relative to returns, the number of returns will decrease and much controversy will be avoided. If the company uses a system of stickers which must accompany each shipment of returned goods, the salesman should tell all dealers about the requirements relative to returned goods. These stipulations should be repeated when the order is accepted and when it is shipped. In this manner the dealer has been given this information three times for each order.

Another reason for merchandise returns is the fact that dealers and the general public do not realize the expenses involved in returned merchandise. They do not think of the fact that the shipment from the manufacturer involved certain expense in putting up the order—packaging, crating,

[8] "Department Store Returns and Allowances Classified by Basis of Sale," *Domestic Commerce*, July 8, 1929, p. 15.

elevator service, clerks to render the bill, cartage, and bookkeepers to enter the statement on the account. Then, when the goods are returned, they must be carted back to the seller's place of stock, checked by receiving clerks, redistributed to stock, credit memos issued, and the proper entries made by the bookkeepers. In addition to this clerical work and handling, the goods may have to be reconditioned or repackaged before they can be sent to another customer. If customers and sales managers recognized the expenses involved, they would probably think twice before inviting or allowing returned goods. If dealers and other business men do not take into consideration these costs, we cannot expect the average housewife to consider the retail merchant when she wishes to return an article, for women know even less about the inner workings and costs of doing business. It is small wonder, then, that the Ohio Survey indicated approximately one week as the average time which returned retail goods are outstanding. This is especially apt to take place when the sales clerk insists that the doubtful customer take the article home and says: "If you don't like it, just bring it back." A campaign of education for sales managers, dealers, salesmen, and customers seems to be the answer if we are to lessen the evils of returned goods. The seller must stand back of his merchandise and see to it that it reaches the buyer in good condition, but there is a limit to the extent to which he should accept returns.

Competition and good will.—The contemporary American Tobacco Company's Lucky Strike and sweets advertising campaign is of classic interest to the student of competition. Their slogan, "Reach for a Lucky instead of a sweet," was supported by a $12,300,000 advertising campaign for the year 1929.[9] One of the axioms of modern selling is the principle that the less we say about the competitor the less we tend to call attention to the competitor. It is doubtful whether the manufacturer of a cigarette could

[9] Hill, George Washington: "American Tobacco Describes Lucky Strike 'Sweets' Campaign," *Sales Management and Advertisers' Weekly*, Dec. 22, 1928, p. 736.

induce women to believe that their health would be improved if they smoked a particular brand of cigarettes. But it might be possible to obtain more women customers by creating a prejudice against sweets, because women are the main consumers of candies, and many are fearful of becoming stout. In the survey of the psychological problems of one thousand normal persons, 20 per cent of the married women and 29 per cent of the single women were worried about getting fat. Only 8 per cent of the men were fearful of the same possibility. If the sales of Lucky Strike cigarettes were increased throughout all or some of the company's channels of distribution, it would be well to know how much of the increase could be attributed to the slogan and how much came as the result of previous advertising of another kind, more intensive sales efforts, greater number of retail outlets, etc. So far as the writer knows, no scientifically valid data have been published which show the true effect of the Lucky Strike slogan.

American industry appears to have progressed because of friendliness toward competitors rather than because of antagonisms and secretiveness. In some of the oldest cities in the world, in China, all the firms in similar lines of business are in the same locality. We have the same tendency in American cities, for we have our department stores, auto dealers, and others in the same localities of the city. Competitive firms seem to thrive best when they are physically near each other. They also seem to thrive best when they are coöperative in policies toward each other. The mass of citizens prefer to see evidence of good sportsmanship in business, as well as on the athletic field. Advertising and selling methods which imply a "knock" of a competing firm are not conducive to good will on the part of the customers.

The real competition that any competitor gives another firm is not in the firm itself, but in the superior service that the competitor gives his customers. If one business man wishes to overcome the advantages of another, his easiest and most profitable line of attack is not to talk about the

competitor, but to improve his own service or to discover a new and better service. Certainly, his economic success and self-respect cannot lie in the ability to out-talk another firm, but in his ability to give better quality, lower prices, or more prompt shipments. And if another competitor does resort to tricky or false methods of playing the game of business, it does little good to threaten him with a lawsuit. It might be better to invite him to dinner and explain the true condition in a frank and informing manner. Rushing to one's lawyer is a poor method of influencing honest people or beating the business supremacy of a competitor.

Consumer contests.—Many issues of certain national magazines contain advertisements which announce a contest that is open to any person who wishes to enter. Sometimes the contestant is required to use the company's materials or to study them in order to get the necessary information to enter and have a reasonable chance for a prize. Some of these contests have stimulated thousands of persons to enter, as indicated by the following published figures which have been chosen at random:

Company or Product	*Number of Entrants*	*The Prize or Prizes*
Spud Cigarettes	20,000	559 prizes ranging from $1,000 to $2. (To determine copy appeal.)
National Laundry Owners' Association	1,044,272	Total of $50,000 in cash and 12,000 awards. ("Why the laundry should do my washing.")
Shredded Wheat Company	50,000	$500 for the best recipe. Also lesser prizes.
General Baking Company	2,263	$300 for the particular city where conducted. (Housewives submitted loaves of bread.)
Fould Milling Company	5,000	$100 for best conundrum about their spaghetti.
American Ever Ready Works (1916)	531,000	$3,000 for best name for Ever-ready flashlight. (Each of four entrants received $3,000.)

Company or Product	*Number of Entrants*	*The Prize or Prizes*
American Ever Ready Works (1920)	509,462	$10,000 total with $3,000 for first prize for a twelve-word title for a picture.
Good Hardware Magazine	5,000	$50 for best title to a picture. (One answer received for every ten readers.)

The details of these contests vary, but they all have four or more dangerous good will aspects. When 10,000 people enter a contest and only one receives a prize, the other 9,999 are more or less disappointed. Many of those who fail to obtain a prize spend many hours in thinking and talking about the answer. Some few may go so far as to visualize how they are going to spend the money which they feel certain to win. Even though the ideas submitted by the winners are decidedly better, each contestant is apt to criticize them. His feeling of loss and resentment is likely to be directed against the product rather than toward the judges. The time he lost is felt keenly and he may decide to waste no more time or thought on that particular product.

Dealers' shelves may also be loaded by the salesmen, so that the dealer can supply persons who wish to know more about the product before answering. Of course, this is an artificial demand that tends to subside very quickly when the interest in the contest wanes and the dealer may be loaded with a slow-moving stock. Also, an excessive percentage of the company's advertising appropriation may be diverted to the contest, so that the regular channels of distribution of the firm's products may not receive sufficient advertising attention. Consumer contests often prove to be disappointing as a stimulant for stable distribution and sales as well as for new names or slogans.

Contests which require the coöperation of schools and school children are apt to be frowned upon by the school officials, because they disrupt the school program. Contests that involve the use of the United States Post Office, and all contests do, may be debarred from the mails, be-

cause of the element of "consideration." This law, Section 473,[10] is so vague that it is always well to obtain an advance decision of the postmaster where the printed matter is to be mailed.

Some of the principles which have been found helpful in organizing and conducting successful consumer contests are:

1. Have a sound reason for the contest. Some contests are conducted merely as a publicity stunt. Others are for the purpose of obtaining a new trade name or slogan, and a third variety wish to obtain new ideas concerning the consumers' experiences and uses of the product. In the last variety, the prizes are offered for new recipes or methods of utilizing the product to advantage. The first kind of contest is apt to be disappointing and short-lived in its effects, but the third may be made helpful if all other factors are adjusted.

2. Prepare a definite set of rules which are fair, understandable, and complete as to possible later trouble in interpretation. Legal difficulties have arisen, because the rules stated that the entries must be "received" by a certain day and hour instead of "mailed" or "bearing the postmark" of a certain time. Some of the people who wish to enter the contest are certain to write to the company for further information and the more ambiguous the rules, the greater the number of special inquiries that must be answered. When the entries are received, they must be sorted by office clerks for failures to conform to the rules. The more definite the rules, the easier will it be for the clerks to perform the preliminary sorting. When thousands of contestants enter a contest, three or four selective sortings for eliminations must be made by clerks or others before the best entries can be submitted to the judges.

3. The total amount of the prize money and the cost of conducting the contest should be kept in proportion to the

[10] "Postmaster General New on Postal Rules Governing Prize Contests," *Printers' Ink Weekly*, Oct. 4, 1928, p. 49 ff.

anticipated results for the advertiser. Inasmuch as the trade name and slogan contest have proved disappointing in many cases, the aim of the contest and its worth should be judged by the value obtained from a cross section of the consumers' experiences and attitudes toward the product. Needless to say, the cost of the contest should not exhaust the advertising appropriation for more stable purposes.

4. The amount of the prize money is not so important to entrants as the idea underlying the contest. If the idea is tantalizing to the readers, a larger number of entrants will be received than with a mauve-colored idea and large prizes. A large number of small prizes should be offered with several major prizes. One trade association that conducted an annual contest found that the number of participants was doubled when the number of prizes was doubled, even though the total amount of money was the same.[11]

5. The contest should be directed toward some specific group of persons whose reactions are of value to the advertiser. In most cases, these are the consumers. In others, the designers of products are to be reached or the school children. Whatever the specific group may be, the appeal should be directed to and should reach the desired group. Media and mailing lists should be selected with this group in mind.

6. The distributive organization should be sold on the contest. This means that the company's salesmen and dealers should know about the plan and be prepared to take an active part in the operation of the contest. Preliminary announcements should be sent to all members of the distribution channels and they should be given sufficient inspiration to be enthusiastic about their part in the scheme.

7. Arrangements should be made in advance in order that all entrants may be notified that their entry has been received and will be given careful consideration. As most of the contestants cannot possibly receive a prize, they should

[11] Slater, A. L.: "How Well Do Consumer Contests Work?" *Advertising and Selling Magazine*, Feb. 6, 1929, p. 27.

have the satisfaction of knowing that the company appreciates their efforts and time. These names and addresses may be used for later circularization for certain purposes. All entries must be filed and kept available for several years after the contest has closed, because a few individuals have found that they can start legal action against the company for imagined unfairness. The company should have their entries available for prompt submittal to a court.

8. Before the contest is finally launched, a preliminary investigation should be made of its operations. This should include its submission to the postal authorities for any possible interpretation of unfairness or lottery. The mailing department should be analyzed as to its ability to handle the additional mail. The legal counsel of the company should be consulted for possible difficulties during or after the contest. The dealers should be consulted for their reactions to the part they may have to play in supplying blanks or articles for entry. Some persons who might be considered logical entrants should attempt to answer the problem or supply the desired ideas, in order that all possible ambiguities can be corrected. In general, the possibilities that lie within a consumer contest are so vast and varied that the company should prepare for the many contingencies that may arise within and without the organization. Rightly conducted, the contest may result in a large amount of benefit and no grief.

Special sales "days" and national "weeks."—Every American seems to be acquainted with some of our national commercial "days" and "weeks," such as Mother's Day, Straw Hat Day, Old Home Week, and Fire Prevention Week. Some of these weeks and days have a purely commercial objective, but others are of an educational nature. All kinds of weeks have been suggested at various times, such as National Insect Killing Week, Reindeer Week, and Umbrella Week. Dr. Scholl's Foot Comfort Week has been in successful operation since 1917. A study of the records of weeks indicates that most of them live for a few years

only and then die from neglect and lack of interest on the part of the promoters or the general public. However, many of the promoters of special weeks find that the scheme does increase the sales of their products during and after the special week. When a special week is promoted by a manufacturer, he should have a definite reason for it, such as the culmination of his annual advertising efforts, demonstrations to the public concerning the merits of the product, or an effort to launch a new product or better methods of selling. The special week does concentrate the efforts of dealers and gives all of them a concerted start for additional effort. When a special week or day is an integral part of a well-rounded advertising campaign, its benefits may be quite profitable for the advertiser. It also tends to educate the general public concerning their needs, such as the Children's Book Week and National Thrift Week. Whatever its purpose and whoever its sponsors may be, much coördinated effort is essential for its success. It must do more than talk to the public about something that it should do. It must offer a definite article or two for the use of the average citizen or the class of person to whom the appeal is directed.

In a survey of consumer opinion of the retail stores of Syracuse, New York, one thousand adults were interviewed. Each was asked: *"What is your opinion of dollar-day sales?"* The answers were analyzed as follows:

Shoppers in general are rather decisive in their opinions of dollar-day sales. Their replies indicate rather clear-cut favor or disfavor with the two rather spectacular bargain sales of the year staged by upwards of one hundred Syracuse stores. Of the total group interviewed, 41.3 per cent said they took advantage of dollar-day sales; 40.4 per cent said they did not; 18.3 per cent indicated only a casual interest. Both extremes of opinion as to such sales were expressed in "no uncertain terms." The enthusiastic group is decisively enthusiastic. In their characterizations of this form of special sale they used such terms as, "I always attend," "Very interesting," "Can get some fine bargains," "Fine advertising in those sales," etc. At the other extreme, voicing the opinion of the skeptical group, were

such expressions as, "No good," "Lot of bunk," "Too crowded," "Hurt business in the long run," "A sale of left-overs," "Don't believe in them," etc.

Men are more decisive than women in their opinions of dollar-day sales. A larger percentage of men (46.0) indicated a full-fledged interest in such sales than was indicated in the replies by women (39.2 per cent). Men are inclined to do a brief bit of highly selective shopping on dollar-day and seem more satisfied with their rather narrow range of purchases than do the women, many of whom make such strenuous efforts to secure bargains that the disappointments with which they meet tend to pull down their general average of satisfaction.

Interest in dollar-day sales progresses as we go from the wealthy group to the middle class, and on to the poorer groups of shoppers. The percentages of those groups taking at least some advantage of dollar-day sales are: wealthy, 43.5; middle class, 49.9; poor, 71.4.

There is no marked difference of attitude toward dollar-day sales assumed by the suburban shopper as opposed to the city shopper. The suburban shopper is still the occasional shopper.

Of the total replies received from all groups, approximately 42 per cent indicated enthusiastic interest in dollar day; 18 per cent, a moderate interest; 40 per cent, a very slight interest or none at all.[12]

Some of the dangers or negative aspects of special days and weeks are that people wait for special sales when they believe that they can obtain unusual bargains rather than purchase at the times when their needs justify it. They shop around among the various stores which have periodical special sales and make their purchases from those dealers who happen to offer the desired product as an unusually low-priced special. Many housewives do not think of buying furniture until the time of the February or August furniture sales. Many buy only the special article at the reduced price. As a result, unexpected demands may deplete the supply of the dealers, and some customers doubt the truth of the clerks' statement that the supply is exhausted. Sometimes the sale article satisfies the purchaser when a better article might be sold at a higher profit. Experience indicates that the price appeal is weaker for some products and dealers than a quality appeal. In spite of the defects and annoyances of special sales, they will continue to be a part of modern American merchandising for many years.

[12] Bice, Hubert E.: "Consumer Opinion of the Retail Stores of Syracuse," *New York Business Review*, June, 1929, pp. 10, 11.

The effect of commercial finance companies.—The majority of automobile dealers who sell cars on an installment basis do not attempt to collect the payments but sell the contract to a commercial finance company. This has been the accepted procedure for the purchase of automobiles on credit. In recent years, the practice has been extended to lower-priced articles, such as electric refrigerators, radios, farm machinery, and vacuum cleaners. From the standpoint of convenience and financial security, the method of discounting the installment contract is highly successful. From the standpoint of the customer, it is a potent force for the development of much ill will toward manufacturer or dealer.

When the customer is canvassed by the salesman for his order, he begins to feel that the salesman is more or less of a friend. The salesman gives a human and pleasant touch to the purchase of the commodity. When the contract is signed, the salesman tells the customer that the company will give him free service and repairs on the machine for a given length of time, which is as much as two years for a certain electric refrigerator. The company installs the machine and the customer is satisfied. However, about two weeks after the contract has been signed, the customer receives a formal statement from a strange concern, a finance company, wherein he is told how to make his payments and where to make them. This turn in the relationship between the buyer and the seller may be wholly unexpected and may destroy the feeling of friendliness that the buyer felt toward the salesman, the product, and the maker or dealer. The customer suspects that he will have a hard time to induce the seller to give him the promised service; hence, he is apt to seek trivial reasons which justify

him in demanding service. If the service is not as prompt or as satisfactory as he thinks it should be, the customer will be pleased to be offended. In his payments, he is no longer dealing with a human being but with an impersonal concern whose sole interest is that of getting his money. Where several unrelated companies are involved in the sale and collection of payments for an article, each company will seek its own interests only and the ill will that is bound to be generated with many customers will be directed toward the product. Some customers may even like the product itself, but they will not be enthusiastic about asking their friends to buy the same article from the same dealer who was "so nice and friendly when he sold the machine but lost all interest in the buyer after the contract was signed and sold to a cold-blooded collection agency." If possible to do so, the seller should collect payments for his sales. If necessary for him to sell his contracts to a finance firm, he should tell his customers of his intention to sell the contract and make some arrangement whereby he will be acquainted with the progress of collections of his own former contracts. He can hardly afford to take the attitude that each customer buys his article but once and, therefore, he can ignore any ill will that may arise from the collection of the payments for his sales.

Rumors and prejudices.—Rumors or whispering campaigns are apt to be prevalent during wars and political campaigns, but they also occur in the business world, where they may do great damage before they are stopped. It is difficult to measure the effect of such rumors; but the manager of one milk company stated that the consumption of milk temporarily decreased about 20 per cent in one city, when the politicians claimed that the milk was contaminated and of poor quality as a result of the machinations of some of the politicians in office. Many industries and individual business firms have to contend with rumors and prejudices that are promulgated by sincere persons who are ignorant of the facts. The manufacturers of canned goods

must deal with the superstition that foods prepared in cans are poisonous. Some people still believe that foods cooked or allowed to stand in aluminum ware are poisoned. False prejudices of this type are: laundries use chemicals that ruin the clothes, coffee causes heart trouble, tea is not a he-man's drink, carbonated beverages are bottled in dark and dirty cellars, women who do not bake their own bread are lazy, playing billiards causes crime, and the smoking of cigarettes by women produces unhealthy children. Such prejudices may be of long standing and are difficult to educate out of people's minds. Business must contend with these as well as with the short-lived rumors that occur.

Banks are particularly sensitive to any rumors or whispered campaigns, for, when one bank in a territory fails, frightened and dissatisfied depositors question the stability of a local bank, and soon the question becomes an imagined fact. Three methods have been used to combat rumors. One is the direct answer to the rumor in newspaper or other advertising, such as the advertising of *Asia Magazine:*

SPIKED!

> We want to spike that notorious dame, Rumor. It is wafted back to our ears that ASIA'S main circulation is outside of the United States. Nonsense! Just sheer nonsense! It is one of those wild assumptions that because a magazine is called "Heaven" it circulates in Paradise. Less than 2.75% of our subscriptions come from overseas. And that's that! [13]

Sometimes the advertisers who wish to throttle rumors by the direct answer also include the offer of a reward for proof of the rumor. During the recent war, a soap company offered a reward of $1,000,000 to any one who could prove that one dollar of foreign capital was invested in the capital stock of the company.

[13] Part of an advertisement of Asia Publishing Company, *Printers' Ink Weekly*, July 1, 1920, p. 127.

Another method of meeting prejudices and rumors is to pay no direct attention to them but to advertise the positive side of the story. The cigarette manufacturers did not multiply the number of cigarette smokers by denying the effects of smoking on the health of smokers. They simply showed the public pictures of famous men and women who smoked cigarettes and allowed the reader to draw his own inference. The joys and prestige of smoking were emphasized.

A third method is for the maligned person or firm to capitalize the rumor for the benefit of customers or friends. At one time the rumor got abroad that the country's biggest manufacturer of farm machinery had decided not to sell repair parts for his machines but to require the farmers to buy new machines. Naturally, the farmers were greatly disturbed, as this type of equipment was comparatively expensive. The manufacturer then published advertisements in the farm journals and branded the stories as false. The dealers were instructed to prepare for a "National Fix-up Week," when they featured the repair parts for the manufacturer's machines. The special week was a success, largely because of its direct connection with the rumor.

When the Van Heusen collar was first put on the market, some of the other manufacturers of stiff collars published advertising to show the superior appearance of the starched collar. Bankers and noted men were shown with starched collars. The Van Heusen manufacturer did not attempt to meet the argument in direct rebuttal but used humor. The stiff collar was humorously pictured as part of an exhibit in "Ye Hall of Discomforts." The hard-boiled shirt and the stiff collar were abolished by the "Society for the Suppression of Profanity." Ninety per cent of the advertisements consisted of humor and 10 per cent of serious copy. Few rules can be offered for the answering of rumors and popular prejudices. In some cases, a direct answer seems to be most effective. In others, educational advertising is the best in the long run. If the rumor or prejudice can be

tied up with a positive or humorous desire, the unpleasant situation may be capitalized.

The public relations counselor.—Propaganda itself has received a great deal of propaganda in the course of the last generation or two. The sophisticated academicians who disagree with the social or economic order are prone to label certain ideas with which they disagree as "just propaganda." For example: if the proponent of the present Russian experiment in economics reads an article that describes the poverty of the Russian peoples, he is apt to dismiss it as propaganda. Politicians also find it a convenient word behind which to hide. In fact, many of our intellectual and business leaders can satisfy a closed mind against unpleasant ideas by calling the unpleasant new ideas propaganda. It is even used by the anti-prohibitionist when he reads data that present experimental conclusions which indicate that alcohol is harmful to personal health.

Propaganda seems to be necessary to the successful prosecution of certain political and commercial ideas which are to be accepted by the general public. The masses of people can be influenced more easily by stimulating their emotions than by persuading their intellects through logic. The term "education" is in good public standing. The term "propaganda" is disliked by some people because of its connotations. Education appeals to our intellects. Propaganda is directed toward our emotions, and the most frequently used emotion is hate. The tender emotions are not of use to the propagandist. Education and advertising are known for what they are. Propaganda hides its real motives and tries to gain our coöperation by having us think and act in the desired manner without our knowing what such behavior implies or involves. The source of propaganda is camouflaged. The sources of education and advertising are plainly stated or known. The typical propagandist labors because of the pay or reward that he is to receive. The true educator labors for the joy of per-

forming a task in which he believes and which he loves. In recent years, however, the nature and functions of the propagandist have changed, if we are to believe one of the best known contemporary propagandists:

> New activities call for new nomenclature. The propagandist who specializes in interpreting enterprises and ideas to the public, and in interpreting the public to promulgators of new enterprises and ideas, has come to be known by the name of "public relations counsel."
>
> The public relations counsel, then, is the agent who, working with modern media of communication and the group formations of society, brings an idea to the consciousness of the public. But he is a great deal more than that. He is concerned with courses of action, doctrines, systems, and opinions, and the securing of public support for them. He is also concerned with tangible things, such as manufactured and raw products. He is concerned with public utilities, and with large trade groups and associations representing entire industries.
>
> He functions primarily as an adviser to his client, very much as a lawyer does. A lawyer concentrates on the legal aspects of his client's business. A counsel on public relations concentrates on the public contacts of his client's business. Every phase of his client's ideas, products, or activities which may affect the public or in which the public may have an interest is part of his function.[14]

The modern corporation of wide social and economic ramifications has a legitimate need of the propagandist of the public relations type. The public relations counselor differs from his predecessor, the publicity director, in that the former's activities embrace a greater number of functions. His work is more important, because he deals with the larger problems of legislation, advertising, employee morale, publicity, and foreign agencies as well as the daily routine of the office correspondent and information clerk. He determines policies and directs employees and others in all the company's contacts and relations with the public, the customers, and the employees. Where his importance is fully appreciated, he is recognized by the board of directors as an official of standing. His functions include the dignified contacts with legislators and executives, and he also studies or directs the tactfulness of the letters which are sent to customers in the collection of past-due accounts, the hiring and discharging of employees, the attitude of the information clerk toward visitors, the cordiality of the reception of dealers at the factory, the educational value of plant trips by classes of college students, and the advertising and sales efforts. He is the applied psychologist in the development of big business good will.

[14] Bernays, Edward L.: "Propaganda," Horace Liveright, Inc., 1928, pp. 37-39.

Projects.

1. Collect some advertisements from current magazines, the main purpose of which is the building of good will.

2. Visit a store or manufacturing concern and analyze the devices that are used to obtain good will on the part of customers. Study the methods used in dealing with the solicitors of charity advertising, giving salesmen a high standard of integrity, etc.

3. Make a study of the value of good will service bureaus, such as the health services of the Metropolitan Life Insurance Company. How can the values of such services be measured?

4. Collect the carbon copies of a company's letters of reply which are sent customers who complain about the product or services. Do the letters build good will?

5. Prepare a set of rules for the guidance of the person who wishes to win a prize in a consumer contest.

6. Prepare a list of the functions of a large public utility corporation which should be under the control of a high-grade public relations counselor.

CHAPTER XVIII

The Appeal of the Advertisement

The appeal or the keynote of the advertisement.—Robert R. Updegraff [1] tells how one keynote for a campaign was found:

This whole discussion of the appeal brings to mind a story that Nathaniel Fowler, the veteran Boston advertising man who died the other day, told the writer some years ago. It harks back to the time the Hawaiian Pineapple Growers' Association was planning to advertise in 1907 or 1908. The Association engaged a New York agent to handle the proposed campaign and retained Mr. Fowler as a sort of advisory counsel on the side.

The president of the Hawaiian Pineapple Growers' Association went to Boston to spend several days with Mr. Fowler, so that the latter might get the "innards" of the business, again with apologies to Mr. Bates, or the "keynote," as Mr. Hall puts it.

For several days the pineapple man sat around Mr. Fowler's office and talked Hawaiian pineapples and answered the thousands of pertinent and impertinent questions that only an advertising counsel can ask. But after almost a week of this sort of discussion, Mr. Fowler said he still failed to see the one big selling point that he felt was needed to put the campaign across in a big way.

Finally, one afternoon toward the end of the week, feeling somewhat desperate that they were not getting ahead faster, Mr. Fowler said he decided to try a bit of strategy on the pineapple man to see if he could not corral this elusive selling point.

He suddenly jumped out of his chair, strode across to where the pineapple man was sitting, put his hands around the fellow's throat and half choked him.

"Now, d—n you, tell me why canned Hawaiian pineapples are better than any other," he muttered, glaring into the man's eyes, still firmly gripping his throat.

The pineapple man sputtered and finally gasped, "Why, why —because they're picked ripe."

[1] Updegraff, Robert R.: "Get the Keynote Somehow," *Printers' Ink Weekly*, Jan. 23, 1919, pp. 130-133.

"Then," said Fowler, "I knew I had the selling point that I had been trying for a week to get."

He had literally choked it out of his client. The fact is, this picked-ripe idea had probably been talked of before, but it took this dramatic incident to make it ring out clearly as the keynote.

Very soon thereafter the pineapple campaign started to run, and the keynote of the whole campaign was expressed in four words, "Picked Ripe; Canned Right!" And the Hawaiian Pineapple campaign was very successful.

Which all goes to show that nearly always there exists some way to find the keynote of every advertisable product or service, and it is the present writer's firm conviction that it is worth all the time and trouble and strategy that it takes to find that keynote. And then, once it is found, it certainly ought to be struck in every advertisement so long as it rings true and really is the keynote of the business.

The experienced advertising man who attempts to plan a campaign for a client always looks for the dominant idea back of the company's product or service. In some cases the client has been irritated or "choked" into giving the advertising man the reason why his business should be successful. The advertising man looks for the factor that gives his client's business an individuality of its own. He wants to find out what can be said that will make that product stand out in the minds of readers in such a way that readers will want the thing advertised. It is essential to know the dominant factor present in the product or service that may be hooked up with the associative linkages of a large number of logical prospects. When we study the progression of appeals of advertisements and sales talks we find definite differences. Let us note some examples.

1. The life insurance salesmen have changed their talking point from that of *death* to *life*. They no longer give the prospect a vivid picture of a casket and a hearse, but rather point out the advantages of the insurance while the client is alive. A great many men who have little or no money to their credit in deposits or investments do derive satisfaction from the fact that they will be worth thousands

of dollars when they are dead. They may be poor now but they really have thousands of dollars in assets—eventually.

2. The advertising men of banks do not try to induce people to save so that they may have more money. The rainy day appeal is not very strong. But it is possible to persuade people to save money in order to buy something that they want. Thrift is an effective appeal largely as the means to the end of obtaining a big automobile, a trip to Europe, or a fur coat.

3. One manufacturer of raincoats found that most people bought their raincoats on the basis of price, making their purchases at the cheaper grade of retail stores. This company then changed their appeal to that of style, fit, and smartness, and a 50 per cent increase in sales resulted.

4. A doctor of the Middle West found that the babies of some of the homes which he visited were getting too much cream in their milk. He then invented a simple little mechanical device to skim the cream off the quart bottle of milk and thereby control the percentage of cream. He had a number of requests for his device and eventually a company was formed to sell it in the open market. Sales did not increase and a study was made of the situation. It was found that many of the purchasers of "Skimit" were buying and using it, not for babies but to cut their cream cost and to separate all the cream from the remainder of the milk.

5. One candy manufacturer found that when he advertised the quality of his candy and made references to its excellence he would not sell as much as when he changed his appeal to that of buying his brand as a gift. He discovered that the bulk of his business was composed of business men who buy candy to take home to their wives and daughters or young men who buy it for girls. Price as an appeal was not so important a consideration as the appropriateness of the article for gift purposes.

6. The American Scrubbing Equipment Company originally sold their "Finnell System" of power scrubbing with

the appeal of economy. The cost of labor with their equipment was much lower than with the old-fashioned hands-and-knees method. Their equipment was particularly useful in textile mills where immaculate floors are very important. However, the market would not broaden when the company continued to emphasize the economy appeal. They changed the theme of their advertising to cleanliness rather than the value of the machine itself or the money it would save. They directed their appeal to the general public—to those who frequent public buildings, such as hospitals, stores, and hotels. The headlines of some of their advertisements were of the type: *"Clean People Want Clean Floors in American Business."* The best answer to the question as to whether the change in appeal succeeded for the American Scrubbing Equipment Company is the fact that when this description of their plan was written [2] the company was three or four months behind in filling its orders and was enlarging its plant equipment.

7. The maker of a game, well-known to the public, devoted his sales and advertising messages to the story of the pleasure his game would yield to the family circle. His advertisements usually pictured father and mother and the two children playing the game with happy contented smiles on their faces. His appeal for years was, *"For enjoyment."* Then, upon consulting a marketing specialist, the appeal was changed to, *"To be popular."* With this altering of the appeal the players were pictured in a home which was the rendezvous for delighted friends. The response to the advertising doubled in sixty days and the sales on the games through retail dealers tripled.

8. The manufacturer of a liquid to keep men's hair in smooth condition assumed that most men prefer to have "varnished hair" similar to that of actors and male dancers. Another manufacturer of the same kind of liquid directed his appeal to the mothers of small boys having stubborn

[2] Cobb, Arthur, Jr.: "When the Big Sales Argument Loses Its Punch," *Printers' Ink Weekly*, Nov. 18, 1920, pp. 57-60.

hair and his sales soon exceeded those of the first manufacturer.

9. In a study of the appeal used in advertising a baby food it was found that the fear motive did not pull so well as the love motive. Mothers are already fearful about the health and general welfare of their children. It was found that the copy should be of an optimistic nature. About one-third of the total copy may be in the nature of scientific facts, and these should be presented at the end of the advertisement rather than at the start. The copy should be long rather than short, because mothers read all advertising that interests them relative to their children.

10. A life insurance company found that in the advertising of accident insurance the note of protection to loved ones was not nearly so effective as some other appeals, such as the low price of the insurance of this sort. The best paying advertisement they had was one headed, "Three Cents a Day," which explained how many thousands of dollars of protection this small expenditure would bring. The fear motive and the thrift motive were somewhat less effective.

These ten examples have been taken from literature in the field of advertising and illustrate the reason why the advertisers and salesmen seek the one keynote that will touch off the spark of interest in the prospect. However, the modern sales analyst does not depend upon "choking" his client to discover the basic sales appeal; nor does he wait until chance uncovers the theme that will stimulate the prospects of that company to buy the product. He uses research methods. He collects a long list of appeals, such as the list given in Table XLII, tries the best ones, keeps records of their effectiveness, and then selects the strongest theme or themes. The best appeals may vary for various classes of prospects, but once the forceful appeals have been revealed and applied by sales and advertising departments, great increases in sales often occur.

The variety of reaction tendencies or appeals that can be used by executives.—The manufacturer and distributor of merchandise should appreciate the clear-cut distinction between objects as objects and the use of the objects as a means to satisfy some craving or desire. Food is not desired as an object. It is wanted only as a means to an end. This statement may seem trite, and yet, when business men are engaged in conversation regarding their businesses, they tend to talk and think in terms of the things that they make and sell rather than in terms of the wants or tendencies which they satisfy. As a consequence of this error, the inventor invents machines that are mechanically perfect and wonderful, but they may be unprofitable, because there is no universal want for them to satisfy. Therefore, the psychologist's plea to the business man is that management shall think in terms of human tendencies or wants and not in terms of machines, cloth, or combinations of metal and wood. Within the last decade or two, business men have grasped the importance of this distinction and are now making market surveys in order to discover the wants of society, so that machines and service may be adapted to satisfy the basic tendencies of the majority of logical prospects.

To influence human behavior, the business man cannot ignore human tendencies to action. He can compromise with or thwart them only temporarily, as we learned in the study of psychopathological conditions. His aim should be that of capitalizing them by integrating their influence into the life and needs of business. The advertiser is constantly relating his products to human wants as illustrated in the following list of 88 potent behavior tendencies with examples of current headlines of advertisements. Some headlines appeal to several tendencies. Not all readers will agree as to the tendency that is aroused by some of these headlines, nor is this classification the only one that could be made. The list is presented as an aid to advertisers and other business men who wish to have a wide selection of appeals that can be used in influencing human behavior.

TABLE XLII

OUR TENDENCIES TO REACTION-APPEALS ILLUSTRATED IN THE FOLLOWING ADVERTISING HEADLINES

A. Tendency to overcome difficulties:	
1. Fighting	Banish disease from the earth.
2. Ease of doing	Now it's easy to clean your kitchen.
3. Method of doing	5 ways to use ham.
4. Accuracy in doing	Are you sure the total is correct?
5. Promptness	We can ship at once.
6. Neatness	A neat kitchen is a joy.
7. Certainty	Be sure you are right when—
8. Definiteness	Described so that you can understand it.
9. Saving time	Why work all day?
10. Saving money	Bargains! Bargains!
11. Making money	Earn big profits.
12. Durability	The motor improves with age.
B. Sex or mating:	Surprise your wife! The skin you love to touch.
C. Desire for sensory stimulation:	
1. To eat	m-m-m- It's good!
2. To drink	Have a drink of ——.
3. To taste	Touch it with your tongue.
4. To see	Watch for our new model.
5. To touch	Velvety smoothness.
6. To hear	Have you heard the new cereal?
7. To smell	That woodsy odor.
D. Desire for bodily states to be comfortable:	
1. To breathe	Take a deep breath and ——.
2. To have rest	That tired feeling.
3. To sleep	Now you can sleep all night.
4. To be healthy	Now you can feel well, too.
5. To be clean	Chases dirt.
6. To be warm	In coldest weather, it's warm with——.
7. To be cool	Where breezes blow.
E. To get rid of pain and the unpleasant—fear:	
1. To get rid of pain	End that corn.
2. To avoid pain	See your dentist before ——.
3. To have freedom	Why be a shut-in?
4. To be safe	Safety first.
F. Desire for physical activity:	
1. Exercise	Plant a garden.
2. Manipulation	Move the dial to ——.
3. Travel	See the world.
4. Hunting	The season is open for ——.
5. Fishing	Catch the big ones, too!
6. Play	Come and play.
7. Vocalization	Can you say this rapidly?

TABLE XLII *(Continued)*

OUR TENDENCIES TO REACTION-APPEALS ILLUSTRATED IN THE FOLLOWING ADVERTISING HEADLINES

G. Desire for mental activity:	
1. To learn	If you want to know the story of ——.
2. To invent	Give us a slogan.
3. To create	Write a scenario.
4. To construct	Build a house this year.
5. To know the truth	Here are the facts.
6. To explore mentally	Can you solve this puzzle?
7. To imitate	You can do this, too.
8. To know the latest	Announcement extraordinary!
9. To test or try	Make this test in your home.
10. To have varied mental activity	Try the different.
11. To have same mental activity	Stick to the old.
H. Emotional stimulation:	
1. To experience adventure	Dare to be a leader.
2. To experience beauty	Serve color with your meals.
3. To experience rhythm	The wood nymphs are dancing.
4. Civic pride	Our city is the leading ——.
5. Patriotism	Your country needs you.
6. High ideals	Your ideals demand that you ——.
7. Reverence	The awe of death!
8. Secrecy	Mailed to you in a plain envelope.
I. To laugh:	It's a joke the way ——.
J. To have approval of others:	
1. Gregariousness	Be with us next year.
2. Avoid disapproval	Often a bridesmaid but never a bride.
3. Hospitality	As a host, you need ——.
4. Self-adornment	It adds charm to you.
5. Group membership	Join our club.
6. Imitation of others	You can have the same quality worn by the élite.
7. Individuality—prestige	Men of fashion ——.
K. Dominate others in form of:	
1. Competition	Beat him now.
2. Teasing	Annoy your neighbor by ——.
3. Having the best	Get the best.
4. Having the latest	Get the last edition.
5. Having the most	You can make more money by ——.
L. Submission to others in form of:	
1. Loyalty	We depend on you.
2. Obedience	Obey that impulse.
3. Gratitude	We have served you well.
M. Parental love:	
1. Protection	Don't rob your baby.
2. Devotion	Give your child the best.
3. Family loyalty	Home and happiness.
N. Self-worthwhileness:	You deserve the best.

The appeal versus the form of the advertisement.—Mr. Harold W. Dearing [3] of the Brown Instrument Company has kept some records for industrial advertising relative to long copy and short copy; big pictures, little pictures, and no pictures at all; charts and diagrams as an accompaniment of other pictures and used alone; testimonial versus reason-why copy; and other factors; but he has found that none of these factors is nearly so important as the *theme*. By theme is meant the particular point or problem of engineering interest to which it is sought to relate the use of their product. Theme is of far more importance than type faces, copy, and headlines.

One would expect the theme or appeal of the advertisement to be the one great influence in causing us to be affected by the advertisement. Hand a page of closely typewritten material, haphazardly arranged, to a group of persons and ask them to look it over. If the names of the readers are among the words on the list, it is easier for them to find their own names than to find the names of strangers. Twenty-eight adults were used in such an experiment to find out how long it would take each person to find his name on a page of closely typewritten material. Each person's name appeared five times in the copy. An examiner timed the subject with a stop-watch while the subject looked for and underlined his own name five times. Then the subject or person who had found his own name was asked to find the name of a stranger in the same copy. The stranger's name also appeared in five places in the copy and had to be underlined five times. Accurate records were kept for each name, and it was found that the average length of time required for each of twenty-eight persons to find his own name was 72.6 seconds. For these persons to find the names of strangers required 103.7 seconds or 43 per cent longer.

A theme or appeal in advertising is any idea which is an

[3] Dearing, Harold W.: "What We Learned about Keying Industrial Advertisements," *Printers' Ink Weekly*, Nov. 17, 1927, pp. 33-36.

active part of our system of associative linkages. Our names, our problems, and our own interests are the most stimulating appeals that can be made to us.

One appeal versus several.—The appeal that stimulates one group of persons may have little effect on another group. Mr. W. S. Woodbridge [4] made a survey of the reasons why 114 home owners in seven eastern cities had purchased Bryant Gas Heating and found the factors as follows:

TABLE XLIII

FACTORS CONTRIBUTING TO THE PURCHASE OF BRYANT GAS HEATING

Other people's recommendations:	
Architect recommended	3
Building contractor recommended	2
Heating engineer recommended	1
Friends recommended	10
Neighbors recommended	7
Business associates recommended	6
Relatives recommended	4
Friends dissatisfied with oil	9
Friends or relatives recommended oil	4
Emergency factors:	
Oil burner flooded home	1
Coal boiler broke down	1
Oil burner giving trouble	4
Son no longer available as furnace man	3
Furnace man no longer available in district	4
Furnace man died	2
To replace aged furnace man	1
Neighbors complained about dirt of oil	1
Had to light coal furnace several times this spring	1
Wife not in good health	1
Features with greatest appeal:	
Extra basement space through elimination of fuel bins and dirt	3
Convenience of furnace that can be forgotten when traveling	8
Uniform temperatures	6
Safety of gas fuel	2
Considered a good investment in home	1
Needed uniform heat for children	1
Freedom from furnace tending in general	15
Freedom from attention particularly upon return from work	1
Freedom from tending furnace of another apartment	2

[4] Woodbridge, W. S.: "There Isn't Always One Main Advertising Appeal," *Printers' Ink Weekly*, Feb. 7, 1929, pp. 145-148.

TABLE XLIII *(Continued)*

FACTORS CONTRIBUTING TO THE PURCHASE OF BRYANT GAS HEATING

Style appeal—pride in home and family	7
Negative appeals:	
Furnace man not dependable	2
Had fear of oil	6
Wanted automatic heat without oil's drawbacks	9
Oil too expensive—from personal experience	3
Oil burner needs too much servicing	5
Miscellaneous:	
Want house with apartment conveniences	3
To please tenants in apartment	1
Mr. A. couldn't keep his study warm	1
Cleanliness:	
Family won't tolerate dirt of oil	2
Family wants to eliminate dirt of coal	8
Mr. A. wants to eliminate dirt of coal	5
Mr. A. wants to eliminate dirt of oil	2
Contributory obstacles to purchase:	
Gas is a competitive fuel (coal and oil men)	2
Conscience objects to luxuries	1
Mr. A. wants; Mrs. A. does not	4
Mrs. B. wants; Mr. B. does not	2
Friend's gas bills running over estimate	1
Present home not worth investment	3
Expect to move	3
Mrs. C. wants something else	2
Mr. C. wants money for investment purposes	1
Land or investment poor	1
Retired—furnace tending gives something to do	1
Would only mean firing a servant	1
Afraid would hurt business with coal or oil men	3
Other expenses get priority	1
Proud of ability to operate coal furnace	1

From an examination of the above table, it is evident that a number of different appeals have to be used if the advertiser wishes to reach the great majority of his prospects. The advertiser, of course, does not try to reach every last possible prospect, but only that segment of his field which gives him optimum returns. The old economic law of diminishing returns which has been illustrated in agriculture is also quite applicable to advertising and sales effort.

Reason-why versus emotional appeals.—One of the oldest controversies in advertising is whether to use copy that appeals to the intellect or copy that appeals to the emotions. One argument for the emotional appeal is the fact that the human brain, in its genetic development, is the "old brain," which functions in the instinctive, emotional, and reflexive reactions rather than in intellectual acts. The "new brain," or those parts which are important in the processes of reasoning and association, is comparatively recent in organic history. We all know that, in case of an emergency, the old brain takes control and we react as animals rather than as logical beings. We know that tendencies, such as sex, food, and care of children, are very strong when aroused and that they are easily aroused. Hollingworth [5] has named these two types of appeal the "short-circuit" and the "long circuit" appeals. The short circuit refers to those which are directed to emotions and feelings. He suggested that the short circuit appeals should be used in the selling of personal and intimate articles—articles of luxury, display, adornment, health, food, and safety. Also articles which are enjoyed for their own sake rather than for the service they render. The long circuit appeals should be used for articles which are impersonal, utilitarian, or instrumental in their values, such as books, plows, hammers, and trucks.

In addition to the short and long circuit appeals we also have the "rationalized" appeal, in which case the article is first desired and then the desire is justified on some logical basis. A large part of the salesman's work consists in arousing desires and then giving the prospect logical reasons for buying. Most persons prefer to think of themselves as reasoning beings rather than as impulsive or emotional creatures. They prefer to believe themselves highly civilized and intellectual. Hence, they need some logical or logic-sounding ideas to justify their emotionally reached decisions.

Man performs few purely intellectual acts. The book, the plow, the hammer, and the railroad train all take on an emotional aspect under certain conditions. If a me-

[5] Hollingworth, H. L.: "Advertising and Selling." D. Appleton & Co., 1920, p. 245 ff.

chanic uses a hammer for any length of time he may become quite attached to it, so that he may refuse a new hammer of the same or better quality just because he "likes" his present hammer. Vick's Vaporub may be purchased as an intellectual act, because someone advised it; but, in time, it may become a personal and intimate belonging that is associated with many pleasant or unpleasant memories.

If we want to note the effectiveness of the emotional appeal versus the intellectual, we need but note the difference in attendance and interest between lectures and moving pictures, between fiction and statistics, between study and play, between saving money and spending it, and between courtship and housekeeping. An important part of the function of advertising has been the injecting of emotional life into lifeless and utilitarian commodities. When a need or want is keenly felt, it becomes an emotionally tinted reaction. A business man may decide that he ought to buy a certain piece of equipment; but he will not buy it voluntarily, as a rule, until he has an acute feeling that he simply must get it. We do few things merely because we know we should do them. A man may be convinced that he ought to take more exercise; but he seldom takes it until the exercise has an emotional appeal, such as the playing of golf with pleasant companions or the family physician's warning that it is either exercise or an early death.

Human interest in the copy.—There are occasions when people enjoy hearing a lecturer, because he uses words and ideas they do not understand, as shown by public interest in the Einstein theories. Many people attend a sermon and say that it was wonderful, because the pastor talked about abstractions which they did not and never will understand. However, the abstractions of Einstein or the intellectual assertions of the spellbinder do not move people to do that which we want them to do. Profundity and erudition do not influence us as does the tear of a little child, the assuring grasp of a friend, the kisses of a mother,

and the wagging tail of a dog. They move us to forget the magnificent scheme and devote ourselves to the commonplace. The noble act is often that of giving heart throb

Fig. 48—Advertising must bridge the gap between the corporation and the simple homely man or woman who is labeled the "consumer." Some copy writers find it helpful to keep on their desks and walls pictures such as the above.—*Reproduced by courtesy of Direct Mail Selling.*

for heart throb. Human beings may operate, neurologically, as does the machine; but they respond most quickly to the emotion-gripping commonplaces.

INTENTIONAL SECOND EXPOSURE

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for heart throb. Human beings may operate, neurologically, as does the machine; but they respond most quickly to the emotion-gripping commonplaces.

One of the best methods of attaining human interest in copy is for the copy writer to keep the actual photographs of several typical users of the commodity before him and address the copy to them; he may keep in mind the word-pictures of several prospects who have not yet bought the commodity but ought to buy it. Here are the word-pictures of two individuals who are described by their friends:

1. Mr. A. O. Brown:

Struggling, working, sweating, day by day, under a burning sun, trying to make a living for himself and his family out of a piece of ground from which it is almost impossible to raise anything but weeds of various sizes, shapes, and colors.

Such a type of man is Mr. Brown. I have had the opportunity to become one of his closest friends and as a result have studied him at close range. He is about forty-five years of age, but he appears to be much older. His face is lined with wrinkles and his hands are calloused and roughened by laborious work. His whole appearance speaks of one who has had to do the hardest kind of work allotted to man; but yet, under this hardened exterior, there lives a man whose mind is always looking ahead and figuring out new plans whereby he can give his family more pleasures than they can possibly have under his present way of living. He is a dreamer in every sense of the word. He is continually looking forward, not so much for his own personal gain, as to give his children more opportunities to make good after they go out into the world for themselves.

He is interested not only in his home but also in the affairs of the community in which he resides. He tries his best to convince his neighbors that the old order of things has changed and that, if they are to keep up with the pace set by their competitors, it will be necessary for them to walk in new pathways rather than to follow in the footsteps of their forefathers.

Mr. Brown's one aim in life is to help place his family, his friends, and his community in a position whereby they will be able to lead happier lives than under their present system.

2. Mr. C. L. Austin:

Mr. C. L. Austin has been interested in underwriting securities for the past five years. He was in the insurance business for about 20 years previous to his present work.

1. He is about 50 years of age.
2. He has spent his money as quickly as he has earned it.

3. He is very high strung and loses his temper easily.
4. He is, as a rule, impatient with salesmen, inasmuch as he is one himself.
5. He is a married man and has two children.
6. He is very fond of outward display both for himself and his family.
7. He is generous to a fault.
8. He cannot keep money and will do anything to further the cause of his children.
9. He delights in seeing his family extravagantly dressed.
10. He always keeps at least two cars in use.
11. He advances money to his salesmen without much questioning.
12. He may not have money at present, but "he can always get it."
13. He is very outspoken.
14. The immediate future interests him more than the years to come.

As stated in a preceding chapter when we discussed neural pathways, the individual lives in two worlds—in his own *subjective* world and in the *objective* world. The world of imagination, romance, emotions, and feelings is the subjective world and it is the one in which the individual spends most of his time. In writing copy or presenting a sales talk the most effective method of approach is that of the subjective. This type of appeal stimulates the imagination, emotions, and senses of the prospect, so that the sales talk or advertisement becomes a real part of the individual's mind.

The two methods, the subjective and the objective, may be used in combination. Only a few individuals, such as scientists, engineers, and statisticians, really view the world objectively, and even they are men and women of imagination and emotions rather than merely structures of flesh and bone. It is probably easier to sell a statistician an electric refrigerator on the basis of its health value to his children than it is to sell it on the basis of its economy of operation. It is often assumed that utilities should be sold on the objective basis and articles of luxury and per-

sonal adornment should be sold with the subjective appeal. However, the objective appeal is very limited in its scope and has application to only a few articles such as factory equipment. Even an automobile truck which is ordinarily sold for such factors as economy of operation may be given a subjective appeal by showing the prospect how this big truck will give the pedestrians and other observers the impression that his company is a large concern and does a big business. A piece of silk may be described objectively, its colors, number of threads, wearing qualities, etc., but it will appeal far more to the woman on the other side of the counter if it is described as something that will cause her to look well and be distinctive in a group of her acquaintances.

When it is desired to combine the two methods, it is usually best to use the subjective treatment first and then follow it with the objective or factual treatment. This is the method which is used in the rationalization appeal, where the prospect's emotions are first stimulated, and then objective data to bolster up his emotional decision are given.

One of the best methods for checking up the humanness of the advertising copy is to hand the copy to a salesman and ask him to use it as a part of his sales talk. In very many cases it is impossible for the salesman to do this, because the copy lacks humanness. Unless the copy has enough human appeal in it to enable a good salesman to use it in his sales canvass, it is probably well to go over the copy and revise it so that it has a subjective appeal—a real heart interest.

The statistician has the privilege of thinking in terms of the average man or a fractional woman, but the salesman and advertiser should think of typical living human beings who laugh and work and play and cry and scold. We cannot influence people by talking to them in the abstract. We must see them as fellow lovers, students, salesmen, laborers, or housewives. The friends who are with us on

occasions of emotional stress, such as times of birth and death, are the friends whom we love most.

Human interest carried to the extreme.—To have human interest in an advertisement, we need not go to the extreme and paint the lily; nor do we need to make comparisons which are absurd.

SHE WONDERED WHAT I SAID TO HER HUSBAND

. . . and I'm sure he won't tell!

"Next to a string of real pearls," I told him, "I know your wife would like something rational for Christmas. And, since you've asked my opinion, I recommend one of those lovely *Moonlight and Kisses* flat heating pads."

To have human interest, the copy need not be overdrawn, nor need it be clownish. One advertising man [6] who enjoys humor as well as human interest and who was looking for a job inserted the following advertisement in the classified columns of a weekly trade publication. He used an unusual style because he wanted it to drip humanness:

WRITER SEEKS CONNECTION

This bird is a wordsmith. He can characterize. He has had published two novels. And a business book. Has edited two trade magazines and served on national weekly. Does salesmanship stuff. Name is in *Who's Who*. A forceful rooster who is quiet, unassuming. Man for agency or publisher.

This advertisement brought three replies but none was of value.

He then tried dignified copy in another medium:

Author having twenty years' experience writing articles, booklets, prospectus papers is open for position. Has written two novels, which have been published, and also a business book. At one time edited two trade journals. Was on editorial staff of national weekly last winter. Has sold many sales articles. Married. Name is in *Who's Who*. Understands machinery—its design and application. Metropolitan district preferred.

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[6] Hyde, William Easton: "Say It With Dignity," *Printers' Ink Weekly*, Dec. 28, 1923, pp. 8-12.

He got a job.

Of course, copy should have human interest; but it cannot take liberties with the reader and slap him on the back, for, after all, the reader is a stranger and not a camping pal.

Many copy writers tell the beginner, "Write as you would talk." This is an admirable aim—within limits. We enjoy dialogue or copy that is humorous rather than absurd. In the following example, the illustration for the copy was of comic type, so the copy did not seem ridiculous:

THE DOOR FLEW OPEN

—and in strode the President of the Company.

"Who laid out this advertisement?" he inquired, darting his searching glance around the Advertising Department.

Little Rollo drew a deep breath and rose bravely to his feet. "I did it, sir," said he firmly, "with the Linotype Layout Kit. And, may I ask, just what is the matter with it?"

"Matter," replied the President, a kindly light twinkling in his stern eye, "nothing is the matter with it. It's the best-looking ad this company has ever had, we want many more like this."

"And that isn't all," went on Rollo in evident relief. "It cost less to set than most of our ads do, because the Linotype Layout Kit and the Copy-Fitting Tables enabled the printer to get it just right the first time and there were no author's corrections."

"Young man," exclaimed the President, "that is the kind of initiative we are looking for. I am going to make you head of the department and give you a handsome raise."

Rollo sighed happily. "How glad I am that I sent in that Layout Kit coupon."

The positive versus the negative appeal.—One of the old arguments among veteran advertising men is that of the negative appeal. Those in favor of the positive side say that, if a street railway company wishes to persuade the public that the company should have an increased fare, the company should not advertise to the patrons its troubles, such as the costs of car operation, bonds outstanding, and the need for new cars. The patrons are not interested in the company's problems. The affirmative arguments, such as the improved service that would result with faster and

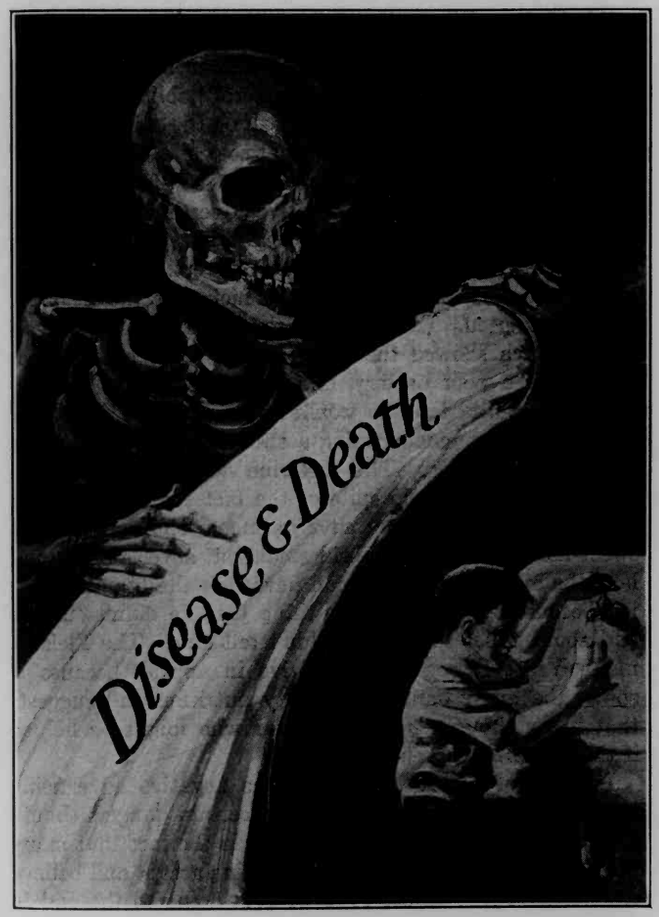

Fig. 49—An example of a negative appeal that is presented in violent form. The headline was *Polluted Water Spreads Disease and Death*. This illustration was used by a firm that manufactures equipment for city water systems.—*Reproduced by permission.*

more comfortable cars, safety devices, branch lines to isolated suburbs, and higher wages for the workers would be more effective. It is claimed that public utilities should not use advertising which gives the general public the impression that the company considers itself on the defensive. The world does not admire the side that seems to be losing, but prefers to root for the leader who is on the offensive.

In spite of the defects of negative advertising, a few such campaigns have been outstandingly impressive. Every reader of advertising can recall some advertising campaigns which impressed him through the fact that the negative appeal was used. Examples are the Philco Battery advertising, which showed the car driver in some predicament because of a poor battery, and the statement of the unfortunate victim that he would never again be caught in so dangerous or embarrassing a situation but would get a Philco immediately. The Listerine advertising seems to have scored heavily, in spite of the fact that the halitosis appeal is negative. The advertisements showed how the sweet-faced girl was often bridesmaid but never a bride, and how the ambitious young man never got the big executive job because of that insidious thing that he didn't suspect and about which his wife wouldn't tell him! The Fleischmann Yeast campaign is negative in appeal, because it shows the many dangers of faulty nutrition and suggests that many thousands die each year who might be helped if they ate Fleischmann's Yeast.

In spite of the records that some negative advertising seems to have been very successful, certain dangers should be given emphasis. A serious danger is the fact that many people who read the negative advertising accept and believe the negative side of the copy without going to the end to find the real gist of the advertisements. Psychologists have learned that it is dangerous to teach students by first presenting the erroneous arguments of the subject under discussion. Many students are more impressed by the errors than by the positive and favorable side, even though the

Glorious Opportunity to Get Rich Quick

Invest in

THE CALIFORNIA RANCHING COMPANY

Now being organized to start a cat ranch in California.

We are starting a cat ranch in California with 100,000 cats. Each cat will average twelve kittens a year. The cat skins will sell for 30 cents apiece. We figure a daily net profit of over $10,000.

NOW WHAT SHALL WE FEED THE CATS?

We will start a rat ranch next door with 1,000,000 rats. The rats will breed twelve times faster than the cats. So, we'll have four rats to feed each day to each cat. Now what shall we feed the rats? We will feed the rats the carcasses of the cats after they have been skinned.

NOW GET THIS

We feed the rats to the cats, and the cats to the rats, and get the cat skins for nothing. Shares are selling at 5 cents each, but the price will go up soon.

Invest While Opportunity Knocks at Your Door

CALIFORNIA RANCHING COMPANY

WARNING

Some gullible people will try to buy this stock. It is a foolish fake, of course, but no more foolish than many "wildcat" schemes being promoted to-day. Investigate before investing. Don't hand your money over to any unknown glib-tongued salesman.

Fig. 50—This poster was placed in the front window of a Cleveland, Ohio, bank as an example of fake schemes which are being offered the public. Unfortunately, many people accepted the negative advertising in the positive manner and wanted to buy some of the stock. When used in another bank, this poster caused sixty-seven people to come into the bank to find out where and upon what terms stock in the cat-and-rat-farm might be purchased. Wherever the above poster was used to advise the general public to "investigate before you invest," the result was such great misunderstanding that it had to be removed.

favorable points far outweigh the negative points. It is dangerous to say to the child: "You misspelled the word *faverable.* You should spell it *favorable.*" Experiments indicate that it is better to say little or nothing about the errors, but to proceed at once to the right method. Figure 50 shows the old story of the advertising manager of a bank who tried to warn the public against wildcat investments by the display of a hypothetical fake. Unfortunately, many readers reacted positively to the negative advertising and tried to buy some of the stock.

Most salesmen have learned the importance of ignoring a certain aspect of the negative side of the sales argument, because of the rule, "We never talk about our competitors." Such slogans as "Avoid substitutes" have been discontinued, because the reader's attention is called to the substitutes rather than to the commodity that the advertiser has for sale.

Another danger of the negative appeal is the possibility that the jokesmiths may turn the appeal into a witticism, such as the twisting of a well-known cigarette appeal into "A carload of coughs." In the case of the Ford jokes the effect was not measurably bad, because of the many qualities of price and endurance of the car which outweighed the social mediocrity attached to the driving of an old Ford. Many advertising men are glad to have the public take up the cudgel against their product so long as a large percentage of the people are sufficiently impressed to talk about or against it. This is a dangerous policy and success is the exception rather than the rule with those who use it.

The "shock" appeal also tends to lose its force after repetition. When a person begins work in a noisy office, he notices the noise and is annoyed by it. In time, he becomes negatively adapted to it and may be more comfortable in the midst of the noise than without it. The mother who constantly scolds her child is unable to scare it when the situation justifies a scare. Similarly, the continued use of

the negative appeal loses its shock effect after a few repetitions.

In any discussion of the negative appeal, it is necessary to consider the degree of negativeness. Some negative appeals are not very shocking, such as "Not a cough in a carload," "Barking dogs do not bite," "Won't shrink woolens," and "It will not break." Horrifying negative appeals may be more pronounced in their effects upon those who are neurasthenically inclined. Showing pictures of wrecked automobiles where several persons are killed, homes without any fire insurance burned down, workmen killed because the company did not provide the right kind of electric switches, and mangled persons lying at the bottom of elevator shafts are examples of negative advertising which tend to scare the reader. One argument for that type of negative appeal is that life is not a bed of roses and death is certain for all so that an institution is justified in using radical means to help readers to help themselves. The users say the end is justified by the means. In contradiction to this argument, eighty-two automobile manufacturers in a general meeting of their association once recorded themselves as opposed to "scare copy." They voted in favor of those magazines which kept their columns free from such advertising. The gruesome is objectionable to many readers and causes them to turn the page quickly to some more happy thought. Gruesome advertising often injures some innocent industry. The electrical industry objects to the advertising of electrical switches by illustrations showing where employees were killed for this reason. Describing the thousands and millions of germs that live in most milk and then implying that the milk of the Blank Company has no harmful bacteria often causes some to use less milk than formerly.

The Fleischmann Yeast Company ran a series of advertisements which had small pictures of the alimentary tract. The human colon was described as well as illustrated. To discover the effect of showing the slightly unpleasant

part of the body, an experiment was conducted. Five advertisements of the company were selected with the colon illustration and copy, and five similar advertisements of the same company, but without the colon illustration, were compared with the first five. Then 110 persons were asked to rank the ten advertisements in the order of their appeal. No one was told about the diagram in the two types of advertisements. The two sets of advertisements were not exactly similar, but it is interesting to note that the five advertisements without the colon illustration, as a group, ranked 54 per cent higher than the five with the diagram. It is probable that most readers dislike even the mildly unpleasant in their advertising.

On the other hand, some products have value only or chiefly as preventives of disaster and the public tends to think of these possibilities of danger as imminent and to be avoided. For such situations and commodities it may be necessary to use the negative appeal. But the negative appeal should have the sting removed by showing the positive or desired side of the dangerous situation rather than the catastrophic. A fence manufacturer can appeal to parents of small children by showing them playing safely in the yard rather than as having been run over by passing automobiles. The escaping of the calamity may be given the chief emphasis, or the calamity may be suggested rather than vividly illustrated. The correspondence schools could show the American husband as a hopeless failure; but, in most of their advertising, they tend to show the pleasant side of the good job to which he has attained.

On the whole, one may be justified in generalizing to the extent of saying that, when the product is one which definitely answers a problem of which the consumer thinks only as a problem, such as the shrinking of woolens, the sticking of chair varnish, or the skidding of cars, it may be desirable to present the negative side of the situation. However, the appeal may be negative in nature but so mild or so educational in its effects that the readers are informed

The things you *Should* have said . . . but didn't

SOME of the most potent sales arguments ever drawn up are thought of by salesmen after they have left the buyer's office.

"Taxicab" or "street-car" speeches, some men call them. When you are on the way back from an interview they pile into your mind, replete with ringing phrases and well-turned sentences—points you meant to cover but didn't think of at the time.

"*That's* what I *should* have told him," is the post-mortem that many a man tacks onto a conversation hours later.

This is not so strange. The salesman seldom gets a perfect setting in which to tell his story. Telephones ring . . . there are complaints of service and shipments to be discussed—questions to be answered that are off the main line of argument.

And, anyway—barring professional politicians, train announcers, and circus barkers—there are *darn* few men who *can* think of everything they want to say about their subject while on their feet. That is why manufacturers are using more and better printing both to precede and to follow their salesmen's calls.

TO MERCHANTS, MANUFACTURERS, AND BUYERS OF PRINTING

If you would like to obtain books on the practical use of printed pieces issued free of charge by S.D. Warren Co., write to your printer, asking him to put you on the Warren Mailing List. Or write S.D. Warren Co., 101 Milk Street, Boston, Mass.

Warren's Printing Papers

When a printer suggests a Warren's Standard Printing Paper he suggests it because he knows it has all the qualities that insure good printing, folding and binding—that it is tested for these qualities before it leaves the mill. Many printers are using the Warren trademark (above) in connection with their own imprint to identify productions on Warren's Standard Printing Papers.

The printed broadside has its speech all thought out before it is shown into the buyer's office. Days devoted to careful writing, careful pictures, and careful printing have made it complete.

It spends just as much time on important major points as you want it to spend. It gives as little space to a minor argument as you decide in advance the argument is worth.

A good booklet talks with all the fire of the sales-speech that was never allowed to get fully going. It isn't upset by the buyer's indifference. It won't let the subject get changed, won't discuss your competitor's prices or stock, and isn't discouraged at being laid aside if the buyer's mind doesn't happen to be free at the moment.

There are good salesmen who place before every buyer a well-printed portfolio that pictures and describes their line—and then they make their sales-talk from it.

Often this printing is left behind when they leave. It's a kind of printed insurance that there will be no things they *should* have said—but didn't.

WARREN'S STANDARD PRINTING PAPERS {better paper ~ better printing}

Fig. 51—An example of negative advertising that places emphasis upon the reader's problems. The appeal is negative, but also educational in its effect.

rather than frightened. The best test of the question is that of the measurement of results. Experiments should answer the question as to whether the appeal should be negative, and to what degree it should be negative.

Plausibility in copy.—Advertisers and salesmen often make statements which may be true objectively, but which are not plausible to the hearer or believable by the reader. Some advertisers know that they cannot tell the real truth about a product because the people would not believe it. One fountain pen manufacturer published an advertisement where he claimed that a three-ton truck could run over his fountain pens without any injury to the pens. This probably was true, but an appreciable percentage of the readers did not believe it.

Professor F. H. Lund conducted an experiment on the relation between belief and desire and found that the correlation between evidence and belief was .42, but that between desire and belief was .88. Our beliefs do not rest upon the objective evidence, but rather upon what we desire or prefer to believe.

The public has been given so many schemes in advertising form, such as, "How to get rich quick," "How to be popular," "It is a shame you aren't making $10,000 a year," etc., that many readers tend to ignore advertising.

Some of the mail order houses do not permit their copy writers to overstate the facts about an article. Such statements as the following are prohibited: [7]

> $5 value for $4.
> Regular value—$5.
> Sold elsewhere for $10.
> The greatest value ever offered.
> You can't beat it at any price.
> Nobody could sell it for less.

The mail order concerns have learned that it is necessary to tell the truth and to tell it in very simple words. When

[7] Merseles, T. F.: "Keeping Montgomery Ward's Copy within Bounds of Truth," *Printers' Ink Weekly*, July 31, 1924, p. 114.

the story is told, then the mail order copy writer is through. He does not embellish it with exaggerations. Copy writers, as a group, often are overly anxious to prove to their prospects that prices are very low or that the quality is exceptional.

The advertisement can be made plausible by avoiding copy that is vague and indefinite in descriptions. Definite figures in decimals, such as 99.44, should be used. If prospects may not believe the actual facts in the case, it is well for the advertiser and salesman to quote the results of scientific experiments. These experiments, such as experiments in chemistry or physics, should be conducted by impartial individuals. Sometimes it is also well to quote figures which have been collected from consumer studies. When the electric refrigerator was first put on the market, many housewives would not believe that it was possible to have fish, cheese, butter, and onions on the same plate in the refrigerator without contaminating the butter. When the prospect expressed doubt as to the truthfulness of the statement, the salesman could quote the figures of the number of users of his refrigerator who had actually put these foods together and found that the odors did not pass through to other foods. Sometimes it was more effective to quote figures or statements of actual users rather than those of technical experts. Some people will believe their neighbor sooner than the laboratory technician.

When it is desired to give conviction by means of the testimonial, it is well to quote the letter of a user who is known to the prospect. It is also more convincing to publish a facsimile of the letter and signature of the user rather than merely to set up the statement in conventional type. We like to see signatures, because the signature of a man is accepted as the essence of his personality. Similar to the facsimile of letters are photographs of the actual tests which have been conducted.

The advertiser and the salesmen should bear in mind that the prospect may read or listen to the statements of the

seller without making any comments, even though the prospect may not accept the statements as true. The "unvoiced objection" is quite common among prospects with reference to statements which, on the surface, do not appear to be plausible.

General rules for the appeal.—1. One of the most common errors in the use of appeals on the part of the man who starts a new business or wishes to market a new invention is to announce it as *new*. This is so stereotyped that it has little value and can be used only in a limited manner. Similar appeals are *quality, wonderful, helpful, pure,* and *greatest*. If a concern conducts tests of its own products in comparison with competing products and finds that its own actually are best, it is almost useless to attempt to advertise them as *best* to the public. The public is satiated with claims of *best*. Its *bestness* must be presented in some specific situation rather than as an abstract fact. The quality must be applied to some problem that looms large in the minds of the prospects. *Quality* is an abstraction that does not persuade us. The abstractness of quality must be applied to a definite situation, so that it is a concrete, tangible, living thing.

2. Many studies have been made as to the relative effectiveness of various appeals, such as health, style, economy, taste, success, prestige, comfort, beauty, etc. Such studies have little value, because our reactions are made to specific situations rather than to abstract principles. Fear is not a general trait. The amount of fear that one experiences varies in each fear-situation. The fears that one has when the automobile skids, when some one points a pistol, when one sees a banana peel on the sidewalk, and when one must go to the dentist all vary in degree and are attached to specific situations. Likewise, style may be important in the kind of suit one wears, but has little importance in the model of car used. One form of economy may be important enough to a woman to cause her to spend two hours and a gallon of gasoline in shopping around to find where she

can save five cents on a yard of lace, after which she will spend twenty-five cents for a soda at the most exclusive fountain in town. Economy, as an appeal, is specific rather than general. Every human trait is specific rather than general.

3. The advertiser cannot decide which appeal is best until the appeal is applied to some specific situation. Then, too, the appeal varies in effectiveness with the manner of presentation: how is the appeal illustrated, what is the copy style, what is the art work, the typography, etc. To find out the relationship between appeal in the abstract and the appeals in the actual advertised form, an experiment was conducted with 80 advertisements. The 80 advertisements were divided into eight groups of ten each according to general appearance: type, art work, product, etc. Then 120 persons were asked to rank the copy when in typewritten form. After the copy had been ranked, the complete advertisements were ranked by the same individuals. The coefficient of correlation of the rankings between appeals in the abstract and appeals when used in actual advertisements was only .40. This is only about 9 per cent better than chance coincidence.

In this experiment one series of ten advertisements of a cigarette was used. All of the ten advertisements were testimonials by actors and actresses. The correlation between the copy, in typewritten form, and the same copy in the actual advertisements was .86, or 50 per cent better than chance. This was a high correlation. However, where appeals are more varied than those of testimonials of actors, it is well to bear in mind that the effect of an appeal in the abstract is quite different from that of an appeal in actual use in the advertisement or sales talk.

4. Very few advertising men attempt to present all the good characteristics of a commodity in any one advertisement. Some one distinct feature is presented and an attempt is made to impress that on the reader's memory. Many new advertisers are so enthusiastic about their prod-

ucts that they attempt to tell all the good points in one breath. A notable change for the better in this respect has taken place in advertising in the course of the past few decades.

5. The beginner in advertising and selling is also wont to give undue emphasis to the maker of the product, the size of the company, the length of time that it has been in business, the difficulties encountered in making the article, the number of parts that are used, etc. Few of these interest the prospect. The appeal must be directed toward the needs of the prospect rather than toward the interests of the seller. This is one of the oldest rules in selling, and yet, few, indeed, are the advertising men and salesmen who can honestly say that they have never become so interested in the product itself that they talked only about the values of the product to the user. This is one reason why it is well for most business concerns to have an outsider, such as an agency, do their advertising rather than some member of the firm. Heads of small businesses have cited this rule of keeping the "you attitude," and yet when their own advertising was examined it was filled with the interests of the advertiser rather than the interests of the prospects. When we are close to a business or idea we lose our perspective and need that of the disinterested counselor.

6. The product must be advertised as a means to an end rather than an end in itself. Economy as an appeal is weak for this reason. We do not want to save money just to save it. We may be induced to save money in order to get something else, such as roses, cake, diamonds, travel, or automobiles. The current advertising of a tooth paste with an economy appeal is used in the right way, because the advertiser shows what the saving will buy. He pictures the articles that may be purchased with the saving. The main defect in this particular advertising campaign is the fact that the articles that can be purchased with the saving made from the purchase of this tooth paste for a year are not very valuable. At most, not more than a few dollars may be

saved by using a cheaper tooth paste and three-dollar articles are not of sufficient worth to cause us to take a chance on a new tooth paste. Habit is stronger than three dollars' worth of articles that can be purchased from a whole year of economy.

7. The appeal should be directed toward future or immediate needs rather than past situations. Paying for a past purchase is not nearly so thrilling as the thought of an imminent purchase. Collecting money for deficits of institutions is much harder than collecting money for proposed additions to the institution. "Paying for a dead horse is a burdensome task."

8. Timeliness is not an appeal in itself. By timeliness we mean that the mass of prospects have at that moment a set of active neural patterns with which the proposed advertising may be connected. Nor is humor an appeal to buy. It is rather an appeal to read and obtain a pleasant feeling. Curiosity is not an appeal to buy. It is a means to secure the reading of the message. The advertiser should study his appeal to see whether, after all, it is a reading appeal or a purchase appeal. The appeal should picture to the reader the end or use rather than the means to an end. And the end should have intrinsic worth as an end. It should let the reader imagine himself enjoying that commodity.

9. It is probable that we may generalize to the following extent: (a) economy is more important as an appeal in the selling of staples than of specialties; (b) style is stronger than economy; (c) prestige is more important than comfort; (d) taste often outbids health; and (e) social prestige is stronger than personal enjoyment. However, each individual advertiser must find out for himself which appeal is most effective as far as his prospects are concerned. Few rules apply except in a tentative way.

Sources of ideas for advertising and selling appeals.—It is generally agreed among advertising men that a good idea will succeed, even with a poor technique of layout and

typography; and, conversely, that a poor idea will not succeed even with the best of technique and typography. It is important, therefore, that the business man shall know where to discover keynotes for his advertising and selling. These sources are not arranged in order of merit or described, but merely listed as a source of reference.

1. Become a consumer of the product you sell and note how it affects you or your family.
2. Look for inside information or secrets in regard to the product.
3. Examine the salesmen's orders.
4. Change your mode of living, so that you see the world from a new angle.
5. Keep before you the photograph of some one person whom you consider a typical customer.
6. Change your own working environment from that of an office to a garage, a farm, etc.
7. Consult the retail clerks or persons who sell it to the consumer.
8. Study records of performance of the product.
9. Get the opinions of persons who do not like the product and never buy it.
10. Quiz the salesmen of other products who happen to call on you.
11. Examine the company's correspondence for complaints and commendations.
12. Study the sales demonstrators who give exhibitions at conventions held by the company or by the industry.
13. Study the historical sources for human interest material.
14. Consider the allegory, fable, and fairy story.
15. Consult the users of the product for their reactions.
16. Reverse the appeal. (See question 5 at end of this chapter.)
17. Accompany a good salesman on visits to his prospects.
18. Illustrate famous people using the product.

19. Study the advertising of leaders in all fields.
20. Present pictures of typical employees of your concern to illustrate how the product is made.
21. Study the copy-book maxims.
22. Study current events.
23. Have officials of the company write the copy.
24. Teach the etiquette of its use.
25. Have a "dope file."

"Idea men" are in the habit of keeping scrapbooks and files of good advertising ideas which they cut from current magazines. In some cases this "idea file" becomes a mere collection of clippings that are never used. When an idea is put into the dope file, it often means that it has been buried. It is better to make a direct application of a "clipped" idea to some commodity in which the advertising man is definitely interested. It is difficult to classify ideas of this sort; but, if the material is to be used, a workable system of classification should be planned and each idea applied to a definite commodity or problem in the classification. If the clipping cannot be applied at the time that it is clipped, it is not worth filing.

The advertiser must check the effectiveness of the appeal. When the advertising man thinks he has obtained the best theme for use in his advertising, it is well for him to check it by trying it out on a group of consumers. Sometimes he can obtain a preliminary check of a new appeal by trying to plan several advertisements from his supposed basic appeal. If it is possible to plan only two or three advertisements from a single appeal, then it is evident that the appeal is rather weak or limited in scope.

Exaggerating the appeal.—Among the common terms used in advertising are those in the superlative degree, such as "vastly superior," "amazingly new," "best yet," "superior to all," and "sells at less than cost." Many a reader has difficulty in deciding the extent to which copy is exaggerated. An example is that of the man who plans to build a house and sends for the various advertising book-

lets which describe economy devices. Some of these descriptions are so greatly exaggerated that he tends to accept all the advertising with a "grain of salt." One furnace manufacturer will tell the prospect that he can save him a third of his heating costs; then the maker of an insulation material tells him that by the use of his product he can save a third. The manufacturer of a heat control device says that he can save another third. The reader finally may get the absurd impression that all these devices are so efficient that the coal companies would have to pay him to use their coal!

Another example of exaggerated or super-advertising is: "Ask ten of your friends which is the best cigarette to-day and four out of five will tell you it's the ——."

A periodical advertiser who controls the advertising policies of a group of publications found that, of 1,500 advertisements offered to one of his publications over a certain period, 17 per cent were not acceptable without question. Some of the questions brought up were minor but many were serious. The "Censorship Report," [8] July-December, 1927, read:

TABLE XLIV

Total number of advertisements read	1,520
Total number of questions raised	287
Explained satisfactorily	57
Changes secured	146
Changes refused	41
Run without revision	39
Advertisements omitted	2
Dropped without raising a question with agent or advertiser	43
Total number of questions taken up with advertiser or agent	244
Total number of changes secured or explained satisfactorily	203

The executive was asked the chief things that made the advertising unacceptable.

"Exaggerated claims and competitive statements," he answered

[8] Larrabee, C. B.: "Super-Advertising—Advertising's Worst Enemy," *Printers' Ink Weekly*, Jan. 12, 1928, p. 179.

The Virtue of the Coffee Drink

First publiquely made and sold in England by Pasqua Rosee.

The Grain or Berry called Coffee, groweth upon little Trees, only in the Deserts of Arabia.

It is brought from thence, and drunk generally throughout all the Grand Seignior's Dominions.

It is a simple, innocent thing, composed into a Drink, by being dryed in an Oven, and ground to Powder, and boiled up with Spring Water, and about half a pint of it to be drunk, fasting an hour before and not Eating an hour after, and to be taken as hot as possible can be endured; the which will never fetch the skin off the mouth, or raise any Blisters by reason of that Heat.

The Turks drink at meals and other times, is usually Water, and their Dyet consists much of Fruit, the Crudities whereof are very much corrected by this Drink.

The quality of this Drink is cold and Dry; and though it be a Dryer yet it neither heats, nor inflames more than hot Posset.

It so closeth the Orifice of the Stomack, and fortifies the heat, within, that it's very good to help digestion, and therefore of great use to be taken about 3 or 4 a Clock afternoon, as well as in the morning.

It much quickens the Spirits, and makes the Heart Lightsome. It is good against sore Eys, and the better if you hold your Head over it, and take in the Steem that way.

It suppresseth Fumes exceedingly, and therefore good against the Headache, and will very much stop any Defluxion of Rheums, that distil from the Head upon the Stomack, and so prevent and help Consumptions; and the Cough of the Lungs.

It is excellent to prevent and cure the Dropsy, Gout, and Scurvey.

It is known by experience to be better than any other Drying Drink for People in years, or Children that have any running humors upon them, as the Kings Evil, etc.

It is very good to prevent Miscarryings in Child-bearing Women.

It is a most excellent Remedy against the Spleen, Hypocondriack Winds, or the like.

It will prevent drowsiness, and make one fit for business, if one have occasion to Watch; and therefore you are not to Drink it after Supper, unless you intend to be watchful, for it will hinder sleep for 3 or 4 hours.

It is observed that in Turkey, where this is generally drunk, that they are not troubled with the Stone, Gout, Dropsy, or Scurvey and that their Skins are exceedingly cleer and white.

It is neither Laxative nor Restringent.

Made and sold in St. Michaels Alley in Cornhill, by Pasqua Rosee, at the Signe of his own Head.—From "All about Coffee," *Tea and Coffee*, Trade Journal Company, New York.

An Example of Super-Advertising in 1652.

without hesitation. "You are familiar enough with some of the exaggerations. 'The best vacuum cleaner in the world.' 'Far superior to anything ever before offered the public.' 'We have at last achieved the most economical, the easiest to operate, the finest something or other on the market.' All the turgid, noxious, noisome stream of superlatives that say so much and mean so little." [9]

The postal department attempts to correct certain abuses by debarring from the mail publications that carry fraudulent advertisements; but they cannot be barred from the mail unless fraud can be legally proved. Securing evidence is exceedingly difficult in most cases. The Federal Trade Commission, at one time, had issued a total of 1,003 complaints on unfair competition and 42 per cent of this number involved the subject of implied advertising.

What are the causes of super-advertising?—One of the main contributory causes is the keenness of competition in the present market. In spite of the fact that we are devoting more and more attention to the problems of distribution and increasing the number of salesmen and the amount of advertising, yet we can sell only about 65 per cent of the products that our factories can make. Our capacity for production has far outstripped our rate of distribution and consumption. In the midst of all this keen competition it is to be expected that many salesmen and advertisers tend to overstate or exaggerate the values of their commodities in order to make the desired sale. Advertising agencies are trying, in many cases, to tone down the statements of their prospects; but the manufacturer who gives the agency the account exercises control over the situation and can force the agency to shade its ethics. The struggle for existence is going on in modern advertising just as it has in the jungle. In view of these conditions it is to be expected that a large part of the efficiency of a product is in the pen of the copy writer rather than in the chemical or mechanical product produced. In spite of the

[9] *Ibid.*

fact that super-advertising has its shady and dark spots, we must bear in mind that advertising and selling are not the only fields where exaggeration or false statements are made. When we attend the trial of the thief or the murderer in a modern criminal court, we hear one group of lawyers paint the defendant in exceedingly black colors, whereas the other side may picture him as a misjudged angel. Politicians who run for office make speeches or write publicity that, presumably, presents the "actual facts," but the hearer or reader is quite aware that the facts are shaded to suit the occasion instead of giving an unbiased analysis of the situation. The youth who calls on his sweetheart does not make a scientific analysis of his qualifications as a prospective husband; but he conducts himself in such a manner that the party of the second part gets the impression that he is vastly superior to an Adonis in beauty and more brave than Daniel Boone. The labor leader claims that his side of the controversy deserves only consideration, and the other side, only condemnation.

Within certain limits, human beings dislike humdrum or repetitive acts and ideas. We like to see ourselves in certain situations which lift us out of our actual condition. The movie-goer enjoys the movies, because he can project himself into a new world. We attend the theater not to see life as it is but to see it in a romantic situation. We read fiction not because fiction is written in the same English and style that we use in our daily conversation, but because it is distinctly different. Very few of our best sellers or stories in literature have been written in realistic or conventional style, nor have they painted life as it is lived from day to day. Romance is just as essential in advertising as in the play or the novel. It is the writer's conviction that super-advertising has had some bad effects; but that readers prefer advertising that has the spirit of romance, newness, and exaggerated beauty, even though it is not strictly factual.

Projects.

1. Write a word-picture of a person whom you know intimately. Then prepare an advertisement of a new vacuum cleaner that would appeal to him. Show him your advertisement and note his reactions.

2. Should the shoe repair men of an advertisement for shoe polish be shown so that they resemble lawyers and doctors, or should they be illustrated in the daily garb of shoe repair men? Assume that the advertisement is to be published in a trade journal for shoe repair shops.

3. Collect ten advertisements having a negative appeal and arrange them in order of the degree of negativeness. Have ten other persons arrange them also and record the rankings. Compute the coefficient of correlation between your ranking and the average of the ten other persons.

4. Collect copies of advertisements of devices to save gasoline in the operation of an automobile. Can you collect enough claims to save more than the amount of gas consumed?

5. The reversed letter of indorsement has been used as an advertising theme. Kraus & Company, Inc., cigar makers of Baltimore, Maryland, used this method in advertising their cigars. Each advertisement announced to the mayor, or some other well-known man, that a box of cigars was being sent him. For example:

Greetings, ex-Mayor Preston:

You made a mighty good mayor, Mr. Preston. We're reminded of that on every hand: fine streets, civic improvements, 31 per cent increase in population. You have a way of "doing things."

But there's another accomplishment of yours we know of—your ability to judge a cigar in the first few, thoughtful puffs.

So we're sending you, with our compliments, a box of Flor de Moss. We won't say much about them—we'll let their mellow mildness tell the story.

Flor de Moss cigars are true Havana—there's the lingering flavor of Cuba's golden sunshine in every puff. Baltimore men are finding that out—we want to make sure you know it, too.

Let us know how you like them.

Write a reversed letter of indorsement for the advertising of a tooth paste or an automobile. Would it be necessary to obtain permission of the person addressed in an actual advertising campaign of this kind?

6. If the reader will note the kinds of descriptive adjectives used in modern motion picture advertising, he will find terms such as: "The greatest picture ever produced," "The sensation of the age," and "The Big Smash." Does the reader prefer circus poster advertising for motion pictures or would he be refreshed by less excited claims of quality?

TABLE XLV

EXAGGERATED WORDS USED IN 26 WEEKS OF ADVERTISING OF THE FIVE LEADING MOTION PICTURE THEATERS OF ONE CITY OF 200,000 POPULATION

	THEATERS					
Word Used	A	B	C	D	E	*Word Total*
Greatest	2	5	4	7	3	21
Perfect	2	4		3	3	12
Sensation	5		1	1	2	9
Most	1	1	3	1		6
Super-special	1			2	1	4
Best	2			2		4
100%	3				1	4
Highest			1	1	2	4
Wonderful	3			1		4
Hit		1		1	1	3
Famous			2	1		3
Epic		2			1	3
Supreme	1	2				3
Smashing	1	1		1		3
Miracle	1			1		2
Exquisite			1	1		2
Possible					2	2
Favorite		1			1	2
A wow	1				1	2
Hottest	2					2
Thrillingest		2				2
Enormous	1					1
Marvelous	1					1
Intense				1		1
Funniest		1				1
Immortal	1					1
Classic	1					1
Unsurpassed	1					1
Mammoth				1		1
Masterpiece				1		1
Magnificent	1					1
Gayest	1					1
All-compelling	1					1
Breath-taking	1					1
Totals	34	20	12	26	18	110

CHAPTER XIX

Advertising Devices to Influence Behavior

How words influence us.—John Bright, in delivering a eulogy on a member of the House of Commons, said: "The angel of death is hovering over us. We can almost hear the beating of his wings." A newspaper reporter changed the word "beating" to "flapping." The power of the simile was destroyed. Words are a potent means of influencing others, whether they are spoken or written. Synonyms are never exactly synonymous, and words which are understood by some are enigmas to others.

Secretary of Labor Davis, in his book, "The Iron Puddler," devotes several pages to a criticism of "Thick-shelled Words" and "Long-necked Jargon." Men who earn their livelihood by their muscles are often unable to grasp the meanings which we wish to convey to them. Some of the sentences from his discussion are: "The brain worker who talks to the hand worker in a special jargon that the latter cannot understand has built an iron wall between the worker's mind and his mind. If big words cause misunderstandings, why not let them go? . . . Why should the brain worker invite the manual worker to a confab and then serve the feast in such long-necked language that the laborer can't get it? . . . This long-necked jargon must go. It is not the people's dish. . . . The professional man *plies words*—the working man *handles things*. . . . All my life I have been changing big words into little words so that the employee can know what the employer is saying to him.

"The officers in charge of various military districts of the country were asked the general question, 'Through what mediums can the story of the new army be most effectively

told in your territory?' In many cases the word 'medium' was taken to mean 'method' and in others 'agency' and in some others in its technical advertising sense. The result was a variety of suggestions and opinions of a very wide range of ideas. Some suggestions contradicted each other so that the investigation did not give the desired information." [1]

We have one vocabulary or variety of language for conversation and another for writing. If a consumer is asked to describe an automobile, a shaving cream, or a cigarette, his phraseology is quite different from that of the copy writers. In paging through advertising one finds paragraphs such as the following:

> The benefits to be derived by the public will be far reaching, including more rapid transportation, greater facilities for handling freight and passenger service, and easier connections between local and long-distance travel.

> For the first time in the history of motor car design an authentic system has been devised based upon the canons of ancient classical art.

> . . . But Chrysler has also found that there are so many glorious precedents and inspirations in art, architecture, and design that the search for authentic and harmonious symmetry can actually be reduced to something like a scientific system in which results are certain.

Fifty consumers of tooth paste, shaving cream, and automobiles were asked to describe their own brands in their own words. The average number of words per sentence of the consumers was 12.6, whereas the average number of words per sentence of fifty advertisements of the same commodities was 20.5. The consumers used only an average of 3.9 sentences to describe their favorite brands, while the advertisers used an average of 10.8 sentences. The advertiser should read the copy of the dentifrice advertising in the current issue of his favorite general magazine to note the differences in wording and appeal to realize the

[1] *Printers' Ink Weekly*, April 28, 1921, p. 149.

gap between our conversational and our advertising language.

Words are the "working tools" of the advertiser, the salesman, and the executive. The choice of words and their use determines the effect upon hearer or reader. It is true that some men are successful salesmen and use exceptionally poor English or poor judgment in the selection of words, but their lack of ability in this respect must be compensated for by other factors. Words are the vehicles of ideas, and any idea that we may have can be expressed in words if we but wish to do so.

E. Haldeman-Julius in "The First Hundred Million" [2] tells how he sold that number of books at a nickel each. He has had a rich experience in the use of words and gives some interesting examples of how changes in words or phrases, and new ideas, have increased the sale of certain titles. When a book did not sell well, it was sent to a department known as the "hospital," where the title was studied to determine what it lacked in appeal. Some examples of how the changes in title affected the sales are given by Mr. Haldeman-Julius.[3]

TABLE XLVI

Old Title	*Yearly Sales*	*New Title*	*Yearly Sales*
Fleece of Gold	6,000	Quest for a Blonde Mistress	50,000
The Mystery of the Iron Mask	11,000	The Mystery of the Man in the Iron Mask	30,000
The King Enjoys Himself	8,000	The Lustful King Enjoys Himself	38,000
None Beneath the King	6,000	None Beneath the King Shall Enjoy This Woman	34,000
Ten o'clock	2,000	What Art Should Mean to You	9,000
Pen, Pencil, and Poison	5,000	The Story of a Notorious Criminal	15,800
"Patent Medicine" and the Public Health	3,000	The Truth about "Patent Medicine"	10,000

[2] Haldeman-Julius, E.: "The First Hundred Million," Simon and Schuster, 1928. Also reported in Gridley, Don: "Advertising and Selling 100,000,000 Books," *Printers' Ink Weekly*, Nov. 8, 1928, p. 57 ff.

[3] Quoted from *Advertising and Selling Magazine*, Jan. 9, 1929. Reprinted from *The Three Circles*, January, 1929.

TABLE XLVI *(Continued)*

Old Title	*Yearly Sales*	*New Title*	*Yearly Sales*
Addison and His Times	0	London Life in Addison's Time	7,000
Art of Controversy	0	How to Argue Logically	30,000
Life of Tolstoy	2,500	Life of Tolstoy: Russian Novelist	6,500
Essay on Shelley	2,000	Shelley: Idealistic Dreamer	8,000
Casanova and His Loves	8,000	Casanova: History's Greatest Lover	22,000
Poems of Evolution	2,000	When You Were a Tadpole and I Was a Fish	7,000

He also found that when certain titles were put under new classifications the sales increased or decreased. A book written by Mrs. Haldeman-Julius was listed first under "Biography," then under "Personalities," then under "Confessional Autobiography," then under "Famous Women," where, with its new title, it began to succeed. "When You Were a Tadpole and I Was a Fish" was first listed as "Poetry" and then as "Evolution." When it was listed as "Humor," the sales jumped to 21,000 in 1927. Certain titles also sold better in different magazines. The results for 1927 from several magazines of different types gave the following percentages of orders for books that related to sex: *Liberty*, 71; *Smart Set*, 70; *Graphic*, 62; *Nation*, 61; *Time*, 54; *Pathfinder*, 27. He found that the strongest appeals were (1) sex, (2) self-education and improvement, (3) free-thought or skepticism, (4) (a poor fourth on the list) entertainment, fun, and laughter. Words which were especially successful in titles were "true love," "how to," and "facts that you should know." In the advertising that was used to sell the "Little Blue Books" no one book was favored over another, but each received the same amount of space—one agate line in each advertisement.

Business words that are changing.—Many articles or situations in business are described by words that give them a more pleasant meaning for the public, such as the word "pool," which is now called "pocket billiards." A pool room was classed with a saloon as a rendezvous for questionable characters; now these tournaments or games are no longer

reported as "pool" but as "billiard" games. "Second-hand" automobiles are now called "used" or "reconditioned" cars. Buying on the "installment plan" has been changed to the "budget system of purchase." The Trade Extension Committee of the Plumbers' Association passed a resolution, asking all manufacturers and jobbers of plumbing supplies not to use the words "plumber" or "fitter" in their advertising. A plumber was to be called a "plumbing contractor" and a fitter a "heating contractor." The manufacturing jobbers were asked so to word publicity as to elevate the position of the contracting plumber and the heating contractor. Several meat packing companies have started a drive to eliminate the "hot dog" from the public vocabulary. The term has been changed to that of "red hots." It is doubtful whether the latter term is any better than the first. "Red hots" is probably not more appetizing nor attractive to customers than the term "hot dog." Wrigley had difficulty in persuading the people of Great Britain to become gum chewers until he changed the name to "sweet." The Coca-Cola Company and other concerns have eliminated the "salesman" from their organization; they now have a "service man." They claim that dealers are more likely to talk freely to someone whom they consider a service man than to a salesman. The "soda jerkers" now want to be called "soda salesmen." The propagandist and the press agent wish to be called "public relations counselor" or "publicity man."

Other terms which have been found to work better when changed are "advanced prices," to "new prices," and the word "substitute," which when changed to "alternative" or "improved," is given a positive tinge. Some insurance companies are attempting to change the word "premium" to that of "deposits" for payments on life insurance. "Ready-to-wear" clothing or "ready-made" clothing has been changed to "custom-made" or "ready-to-put-on" clothing. One of the great difficulties of the clothing dealers has been to find some word that would not tell fat women that they

are fat, and such words as "heavy," "stout," and "plump" have been used. Clothing for "women of full proportions" was another term used. The best term, so far, seems to be "stylish stout." Unfortunately, laundrymen still "mangle" clothes, and we all seem to be compelled to use "housewife" for want of a better word.

In a study that was made to find the best term to express economy, 214 persons were interviewed and were asked to indicate the term that they considered the best and the one that they considered the poorest.

TABLE XLVII

RESULTS OF QUESTIONNAIRE ON ECONOMY EXPRESSIONS

Best Term	*Votes*	*Poorest Term*	*Votes*
Wise buying	33	It is cheaper	33
Save the difference	21	Attractively priced	27
Saves your money	19	Fits your pocketbook	19
More for your money	19	More thrifty	14
More economical	18	Wise buying	14
Why pay more?	14	Save by buying here	14
Money-saving value	13	Spend the difference	13
Fits your pocketbook	12	More for your money	9
Less expensive	10	You pay less	9
Save by buying here	10	More for your dollar	9
More for your dollar	10	More economical	8
Spend the difference	7	Less expensive	7
You pay less	6	Costs less	7
Cheaper	4	Money-saving value	6
Costs less	4	Why pay more?	3
Attractively priced	4	Save the difference	2
More thrifty	3	Lower price	2
Less money	2	More inexpensive	2
Lower price	2	Priced for your economy	1
Costs less in the long run	1	Less costly	1
More inexpensive	1		
Price reduced	1		

It is evident that the above introspections of this cross section of the American buying people do not completely describe the situation. It is quite probable that most of these people do not use the term "wise buying" when they think of buying an article which is cheaper than other articles under consideration. In their own thinking they may not use the word "wise buying," but probably use such thought-expressions as, "I believe that would be, all things

considered, a wise purchase," or "That would be a good buy."

The word "free" in advertising.—The word "free" has had an active part in the history of advertising. In its early days, much advertising was of a fake variety, such as "Send for our method of keeping your hair." When the victim forwarded one dollar for this guaranteed method of keeping his hair, he received an old cigar box! Readers of magazines who were asked to send for a free bottle of hair tonic were charged two dollars for a special curling iron that was needed to obtain the full benefits of the tonic.

In spite of its past abuse, the word "free" still has a potent influence for some legitimate advertisers. The best studies of its power have been those connected with coupon investigations. In these investigations the general conclusions indicate that a "free coupon" will result in a 50 per cent increase in the number of inquiries over a charge coupon. The poorest results are obtained when no coupon is used in the advertisement. However, the returns from coupons are determined by the value of the offer, as shown by the experience of the Corning Glass Company.

"During 1927 we offered a free cookbook in a coupon attached to our national advertisements and received a total of 70,000 inquiries for this cookbook during the year. In 1928, we have been offering the 10-cent custard cup for 4 cents, and the requests for this custard cup will run well over 300,000 by the first of January, 1929. A more specific example of the difference in returns between the cookbook and custard cup is the fact that in one magazine, half pages had been pulling about 2,000 inquiries for the cookbook, whereas the first half-page advertisement for the custard cup in the same magazine has pulled some 33,000 inquiries to date." [4]

Some advertisers dislike to use the word "free" and substitute for it a more specific statement, such as, "Without obligation," "No salesmen will call on you," and "Accept a

[4] *Printers' Ink Weekly*, Oct. 18, 1928, p. 109.

sample with our compliments." One concern that sells tool-grinders to farmers took the word "free" out of their "Free trial" offer and changed it, with definite profit to themselves, to "Cash with order to be refunded later on request." In this case, the advertiser gave the farmer assurance of his reliability by asking him to consult his bank references.

Unfortunately, a few of the cheaper grades of periodicals still carry some questionable advertisements which are based upon a free offer. The most prevalent form is that which offers a prize of a $1,000 automobile for the solution of a simple rebus or puzzle. Those who reply never hear from the advertiser directly, and they think that they failed to give the correct solution. The writer's name is used to build up a "sucker list" for later direct mail selling of a stock or magazine subscription. Vigilance committees and associations are trying to prevent the use of such schemes.

One of the greatest problems with certain advertisers has been that of giving free samples in order to obtain leads for their salesmen. Some firms have found that one-third of the persons who ask for free samples are children and persons who merely wish to have mail come to the home. These "rubbernecks," as the advertising men call them, can be eliminated by charging for the sample or booklet. However, no advertiser should ever attempt to make money on his booklets or samples, since in doing so it will prejudice the recipient against the advertiser. The value sent to the inquirer obviously should be much greater than the amount of money paid.

General rules for coupons in advertising.—When the advertiser wishes to have a wide distribution of his booklets or samples rather than a selected list of prospects, he may need quantity rather than quality of inquiries. One advertiser conducted an experiment where he used the same advertisement in the same medium on successive weeks, but alternated the advertisement by adding a coupon and

omitting a coupon. The advertisement with the coupon pulled 90 per cent more replies than the other form.[5] He also found that, when the advertisement was directed to the executives of large corporations, the word "coupon" did not pull so well as "Request Form." Coupon seemed to have a cheap significance.

This same advertiser found that, if the advertisement had a designed border, and the coupon was separated from this by a diagonal plain rule, the number of replies was consistently less than when the separation was made by a dash rule. Even the dotted rule was less effective than the dash rule. The reason for these results may be the fact that the dash rule suggests actual perforation to the reader.

Other rules for the form of the coupon if a large number of returns is desired are:

1. The copy in the main part of the advertisement should refer to the coupon and indicate that the reader will be well repaid for his effort if he will send in the coupon. The more the copy boosts the coupon value, the greater will be the returns.

2. The coupon should have a supporting illustration of the booklet or sample that will be sent to the person who mails the coupon. Putting this illustration in colors or having arrows point to it will add to the coupon returns.

3. The coupon should be sufficiently large to be noticeable and should have sufficient space to enable most people to write their names and addresses on the lines. Some coupons are so small that from 5 to 25 per cent of the names and addresses cannot be deciphered correctly.

4. The coupon should contain the name and the address of the advertiser. The need for this seems to be the fact that many readers clip coupons but do not mail them at once. Later, when they wish to mail the coupon, it is

[5] Simons, Eric N.: "To Increase the Pulling Power of Advertisements," *Printers' Ink Weekly*, Dec. 15, 1921, pp. 109–112.

difficult to find the original advertisement with the address of the firm. One advertiser found that returns fell off 30 per cent when he omitted the name and the address of the advertiser.

5. The coupon should refer to a definite person who has had an important part in the offer which is being made through the coupon. Returns will be greater if the coupon states, "Emily Harper Stevenson, Expert in Interior Decoration of the Moderne Galleries, has written this book for you."

Slogans.—The slogan had its origin among the Highland clans of Scotland, where it was used as a rallying cry during battle. The modern business slogan is a phrase or sentence, used in advertising and selling, in order that the reader or hearer may remember and be favorably disposed toward the article or service advertised. According to one estimate, there are now about 8,000 well-advertised slogans in the United States.

Contrary to public opinion, slogans are not invented by the mental efforts of advertising experts who meet in conference for the purpose of discovering a slogan. Slogans develop from use or incidents in the life of a product. An example of how slogans may develop is the story of the origin of "Good to the last drop."

In the fall of 1907 President Roosevelt went South on one of his celebrated hunting trips. On his way back to Washington, he stopped at Nashville in order to visit one of our national shrines, the Hermitage, Andrew Jackson's home, just outside of Nashville.

His visit was the occasion of a great reception at which refreshments were served and, of course, these refreshments included Maxwell House Coffee. Roosevelt was a great coffee drinker and after draining one cup called for another, with the enthusiastic characterization that it was "Good to the last drop."

This event took place on October 22, 1907. Joel O. Cheek, president of the Cheek-Neal Coffee Company, was one of the guests at the reception for President Roosevelt and the Presi-

dent's characterization of Maxwell House Coffee thenceforth became Mr. Cheek's pledge to the people of the United States.[6]

Sometimes slogans are selected from suggestions made in a consumers' contest. The Bond Electric Corporation (Yale Electric Corporation) conducted a contest in which $15,000 in prizes was awarded. The contest resulted in one million inquiries and more than 250,000 slogans were submitted. The winning slogan, for which a prize of $2,000 was given, was "Rest Renews the Current You Use." In this contest, an attempt was made to have the public become acquainted with a change in company name as well as to gain a slogan.

In spite of the fact that slogans may be very valuable, they cannot be registered as trade-marks except in a few limited cases, nor can they be copyrighted. The only protection the advertiser may have for a slogan is to list it with bureaus who keep records of slogans. This plan prevents unwitting duplication and helps to establish priority rights.[7]

For the slogan to be of value as a catch-phrase, it must fulfill certain definite requirements:

1. A slogan should be connected with the product or trade-mark advertised, in order that the reader may connect the two. "Eventually, why not now?" might be applied to any number of articles. "If it isn't an Eastman, it isn't a Kodak," "There's more power in that good Gulf Gasoline," and "Have you a little Fairy in your home" connect the product with the slogan.

2. Any slogan may be given some worth if it is advertised sufficiently. If the reader will refer to Table XLVIII, he will note that many of the slogans that stand highest in the list of recall value do not connect up with the product in any definite manner; but either these slogans have been advertised for many years or heavily advertised recently.

[6] *Printers' Ink Weekly*, July 26, 1928, p. 36.
[7] Clearing House of Slogans, *Printers' Ink Publications*, 185 Madison Avenue, N. Y. City. See *Printers' Ink Weekly*, March 20, 1924, p. 149.

The value of any slogan does not depend upon its cleverness nearly so much as upon constant repetition.

3. The slogan should act as a focusing point for the advertising policy of the advertiser. It can give continuity to advertising campaigns for many years. To do this, it should have a talking point that does not become obsolete. "The most beautiful car in America" is not a type of slogan that has permanence. Some advertisers recognize the fact that slogans must be changed and conduct contests for the suggestion of a new slogan to displace the old selling idea.

4. A slogan should arouse curiosity on the part of the reader so that he will want to know more about the product, such as "The snap with a turtle back," "Don't forget that Koveralls Keep Kids Klean," and "Be nonchalant—smoke a Murad." Abstractions and mere claims do not impress the reader. Slogans of the type that should be avoided are "The approved gift," "The pinnacle of performance," and "The acme of perfection."

TABLE XLVIII

COMPARATIVE RECALL VALUE OF SLOGANS

(One hundred persons were given 44 advertised slogans and were asked to name the brand which each advertised.)

Slogan	*Right Answer*	*Wrong Answer*	*No Answer*
1. His Master's Voice	100	..	..
2. It Floats	95	4	1
3. Candy Mint with the Hole	91	3	6
4. Children Cry for It	90	4	6
5. Chases Dirt	89	9	2
6. Not a Cough in a Carload	88	5	7
7. It's Toasted	87	8	5
8. Keep That Schoolgirl Complexion	81	11	8
9. Time to Retire	77	16	7
10. America's Most Famous Dessert	72	2	26
11. Good to the Last Drop	68	11	21
12. The Flavor Lasts	67	18	15
13. Delicious and Refreshing	64	5	31
14. Hasn't Scratched Yet	63	5	32
15. Ask the Man Who Owns One	61	7	32
16. There's a Reason	60	2	38
17. The Varnish That Won't Turn White	58	2	40
18. The Most Beautiful Car in America	57	22	21
19. The Universal Car	57	17	26

TABLE XLVIII *(Continued)*

COMPARATIVE RECALL VALUE OF SLOGANS

(One hundred persons were given 44 advertised slogans and were asked to name the brand which each advertised.)

Slogan	*Right Answer*	*Wrong Answer*	*No Answer*
20. For the Gums	55	20	25
21. What a Whale of a Difference a Few Cents Makes	55	16	29
22. No Metal Can Touch You	53	16	31
23. The Instrument of the Immortals	46	13	41
24. Beats as It Sweeps as It Cleans	46	6	48
25. Eventually, Why Not Now	45	38	17
26. It's Off Because It's Out	45	13	42
27. Sees All, Knows All	45	5	50
28. The Skin You Love to Touch	44	35	21
29. I'se in Town, Honey	44	9	47
30. The More You Eat the More You Want	37	15	48
31. The Safe Antiseptic	36	24	40
32. From Contented Cows	35	34	31
33. Ask Dad, He Knows	35	33	32
34. A Car for Every Purse	35	22	43
35. Now You'll Like Bran	32	27	41
36. Covers the Earth	32	20	48
37. A Clean Tooth Never Decays	24	35	41
38. Works While You Sleep	24	18	58
39. Concrete for Performance	18	9	73
40. Pure as the Pines	13	13	74
41. The Light That Never Fails	11	33	56
42. You Just Know She Wears Them	10	19	71
43. The Coffee That Lets You Sleep	9	26	65
44. Best in the Long Run	8	29	63

Of the 100 persons who were asked to name the specific product advertised by each slogan, 40 were women and 60 were men. Their average age was 23.5 years. The group was of more than average intelligence.

Trade names.—Several books have appeared in the last few years in which the authors severely criticized modern business, because of the method of taking low-priced raw materials, labeling them, and then selling them at a high price. These writers have illustrated their claims of unfairness by showing the manufacturing costs and the selling costs. One of the examples is flexible collodion. This chemical has been well known to druggists, chemists, and

physicians for many years. They knew that, when it was painted over an open cut, it would prevent dirt getting into the wound, and allow nature to heal it more quickly. However, the public did not know it. Some shrewd business men then purchased a large quantity of it, put it into bottles, and labeled and advertised it to the public as Nu-skin. The public now pays twenty-five cents for material which would not cost more than a cent or two when purchased in large quantities. Was this unethical?

If the reader should go to a drug store and ask to buy an ounce of flexible collodion or some other advertised article, such as carbon tetrachloride (Carbona), the druggist would probably have to charge more for it, owing to the small quantity of the purchase, than for the advertised and trade-marked article. The entrepreneur who believes that he can take a good article, package it, trade-mark it, and educate the public to buy it is running a great risk financially. The public may take to it and the public may not. The price that we pay the enterprising advertiser is a legitimate charge for our education. Hundreds of formulas are published in books and magazines each day which, if properly advertised, might be a valuable aid to the public. But some one must assume the financial risk and have the necessary psychological ability to educate the public to the values and properties of the goods.[8]

The consumers cannot be expected to know all the properties of the many chemicals that may be purchased from manufacturers or through experts in those fields. The expert must first go to the effort of learning the facts about a few articles, organize a company to explain these facts to the public, plan advertising campaigns, obtain distribution in hundreds of retail stores, ship the goods, collect the money, and then continue to improve the product so that another more aggressive or more able concern may not take the market away from him. Small wonder then that the

[8] Harn, O. C.: "Two Cents Plain; Twenty-five, Fancy," *Advertising and Selling Magazine*, Jan. 11, 1928, p. 22.

firm that took some oranges and trade-marked them "Sun-Kist" believed that the value of that word was $10,000,000.

If laws were passed that would destroy all trade-marks so that the consumer could not distinguish the make of any article that he purchased, the price of goods in America would go up and the quality would go down. Small firms would start factories in each community, but they could not give so good a quality as the larger firms that have the privilege of a distinguishing mark or name. The consumer would not have the guaranty of a certain value which trade-marked goods give him. This is true, in spite of the fact that one of America's biggest department stores now carries the following numbers of trade-marked articles[9] in their toilet goods department:

1,200	different	kinds	of	perfumes
1,300	"	"	"	face powders
600	"	"	"	cold creams
347	"	"	"	rouge
231	"	"	"	lip pencils
110	"	"	"	eyelash preparations
204	"	"	"	sachets
452	"	"	"	soaps
742	"	"	"	toilet waters
396	"	"	"	hair tonics and dyes
68	"	"	"	smelling salts
54	"	"	"	foot remedies
120	"	"	"	cough preparations
100	"	"	"	toothbrushes
27	"	"	"	hot water bottles
76	"	"	"	sponges
526	"	"	"	combs

The psychologist is interested in certain aspects of the word "trade-mark" or "trade name." His interests are largely in the selection of a name or mark and as to whether it may be confused with others. The characteristics sought in a trade name are:

1. Relevancy to the product.
2. Ease of recall.
3. Pleasant feeling-tone.

[9] Bodkins, Odds: "The 8-pt. Page," *Advertising and Selling Magazine*, Jan. 13, 1926, p. 42.

4. Ease of pronunciation.
5. Pictorializing its significance.
6. Flexibility in application to additional members of the family.
7. Meeting the legal requirements for registration.

In selecting a trade name it is well to have suggestions from a thousand or more persons. Several experienced advertising men and psychologists can then individually select about twenty-five of the best names. From these selections, a list of not more than fifty tentative names should be chosen. Those names that occur most frequently in the selections of the experts, or the list of fifty, should be typed on separate cards for testing by a group of persons who buy the product to be named. If possible, at least a hundred persons should be allowed to act as voters.

Several techniques can be used in conducting the tests for each of the first four factors. Relevancy can be estimated by printing the fifty tentative names in a circular arrangement on a large sheet. In the center of the same page are listed ten general commodities, such as bread, soap, perfume, man's hat, clock, etc. In this list of ten commodities should be included the one commodity or product that is to be given a new trade name. In this case, let us assume that a perfume is to be named. The one hundred or more persons who are purchasers of that commodity should be asked to indicate their first and second choices of the ten commodities for each of the fifty tentative names. Each person taking part in the experiment should be told that he is to select commodities from the list of ten on the basis of their relevancy: "Does the name *Cloridor* (one of the fifty) remind you of a kind of bread, soap, perfume, hat, etc.?"

Those names of the fifty that are connected with the product (perfume) that is to be named should be given a numerical weight, as "5" for each first choice, "3" for each second choice, and "0" for no mention. When the hundred or more voters have indicated their selections, each

of the fifty tentative names can be given a quantitative score for its relevancy.

Ease of recall can be measured by collecting the papers from the voters after the relevancy test and asking them to write down all the names that they can recall.

When a list of names in column form is handed to a person and afterward the list is taken away from him, he tends to remember the first and the last names on the list most easily. It is for this reason that the names should be arranged in a circle on the page when the relevancy or recall test is made; or each name can be put on an individual card and the cards shuffled for each voter. Those names recalled can be given a score of "2." If desired, recognition tests can be conducted by showing the names to the voters and then asking them to sort the name cards into three piles: "Those that you are sure you saw; those that you think you saw, but are not certain; and those that you do not recognize." However, in the rating of recognition, it is well to include a number of names on cards that were not shown the voters previously. In this group of extra names, certain very good and certain very poor trade names may be included, because the ratings of the "ringers" will indicate the value of the scores given the names on the tentative list of fifty.

When rating the tentative names for *pleasingness*, the names should be typed on cards in uniform type-style and the voters should be asked to arrange the fifty names into three piles: "Those that give you a pleasant feeling, or are names that you like; those that you are neutral or indifferent to; and those that you dislike, or that would cause you not to buy the product." The names in the first pile can be given a score of "2," those in the second pile, "0," and those in the third pile, a score of "—1."

Ease of pronunciation can be estimated by asking the voters to arrange the names into three piles according to whether they are "Easy to pronounce, fairly easy, or difficult." A numerical rating of each name may be given

according to the pile in which it is placed, such as "2," "0," and "—1," respectively.[10] A better method, however, is to ask a number of individuals to pronounce the names and then with a stop-watch to note the length of time required to respond. In this way, one can discover the many ways in which unusual names are likely to be pronounced and the amount of hesitancy in pronunciation on the part of purchasers.

Every person has had the experience of going to a store to buy a branded article and not being sure of how to pronounce the brand or trade name. In some cases the customer prefers to point to it rather than to be embarrassed by naming it. Most people are certain of how to pronounce *suite* when it refers to a number of rooms, but they are not certain how to pronounce it when it refers to a set of furniture. One hundred persons were asked how to pronounce *suite of furniture* and the time required for a decision was also recorded.

Pronunciation	*Per Cent*
Sweet	64
Soot	29
Suweet	6
Swit	1

The average number of seconds required to decide upon the pronunciation was 2.6. In Table XLIX are given 37 trade names, of which eight are so easy to pronounce or so well known that the one hundred persons interviewed gave but one pronunciation and gave it without hesitation. The table shows what per cent of persons pronounced each trade name in each of five or fewer ways. However, some of the trade names were given as many as nine different pronunciations. The column on the extreme right shows the average length of time required for the 100 persons to decide how the trade name should be pronounced. The length of time required to make the decision is an index of the extent of doubt as to how the name should be pronounced.

[10] Strong, Edward K., Jr.: "The Psychology of Selling and Advertising," McGraw-Hill Book Co., 1925, p. 342 ff.

TABLE XLIX

PER CENT WHO PRONOUNCED THE TRADE NAME IN ONE OR MORE WAYS

Trade Name	*One Way*	*A Second Way*	*A Third Way*	*A Fourth Way*	*A Fifth Way*	*Average Time in Seconds*
Mollé	38	26	13	12	10	5.00
Baume Bengue	35	15	12	11	10	4.84
Cailler	27	25	12	8	4	4.28
Delco-Remy	25	22	20	20	7	4.00
Van Raalte	30	26	17	12	9	3.90
Kroehler	31	30	19	7	4	3.54
Ca-Vel	42	26	22	9	1	3.34
Pyrocide	74	10	4	4	2	3.28
Neponset	33	33	29	5	..	3.10
Houbigant	66	14	8	4	3	3.00
Djer-Kiss	52	26	8	6	4	2.97
Bulova	35	31	14	10	6	2.94
Longines	29	17	14	11	9	2.94
Boncilla	47	28	12	5	3	2.71
Kolynos	22	21	21	16	12	2.71
Gargoyl	75	9	6	5	2	2.69
Patapar	40	27	21	9	2	2.67
Del Monte	63	23	6	3	3	2.53
Pinauds	41	30	11	8	5	2.36
Tre-Jur	39	25	23	10	3	2.31
Lavoris	42	25	18	11	2	2.30
Bon Ami	49	21	14	7	6	2.11
Cliquot	48	34	7	4	2	2.10
Pebeco	44	22	21	8	2	2.03
Ipana	50	28	11	7	3	1.96
Socony	64	21	12	1	1	1.87
Mazola	43	26	17	7	4	1.80
Loews	79	14	7	..	..	1.45
Stetson	63	34	3	..	..	1.23
Eveready	100	..	..	..	..	Pronunciation immediate
Chevrolet	100	..	..	..	..	"
Valspar	100	..	..	..	..	"
Firestone	100	..	..	..	..	"
Ivory	100	..	..	..	..	"
Chrysler	100	..	..	..	..	"
Hotpoint	100	..	..	..	..	"
Ford	100	..	..	..	..	"

It must be noted that some of the most conspicuous business successes have been built upon trade names that are difficult to pronounce. Examples are Bon Ami, Ghirardelli chocolate, Chrysler, Chevrolet, and Houdaille shock absorbers. The officials of the Bon Ami Company always took pains to pronounce their own trade name in all the

seven various ways that the words may be pronounced. This was done in an effort to make consumers feel at ease when asking for it in their stores. However, it is regrettable that advertising must carry the burden of telling people how to pronounce the name of the product rather than telling them of its values. Of course, if a product is sufficiently advertised and then becomes as widely used as the Chevrolet car, the pronunciation problem disappears. Yet, there are

Fig. 52—Example of a Trade Name That Ties Up with the Product.

persons who do not pronounce, in the accepted way, such common trade names as Lux, Victrola, Simoniz, Vanta, and Kroehler.

Picturization of a trade name's significance adds to its effectiveness. Examples of trade names that have been given such characterization are "Disston" saws, "Eversharp" pencils, "Staggard" studs, "Cat's Paw" rubber heel, "Breeze" filter, "Energine" cleaner, and "Thirsty Fiber" paper towel. It is well for the judges of a trade name contest to consult

INTENTIONAL SECOND EXPOSURE

TABLE XLIX

PER CENT WHO PRONOUNCED THE TRADE NAME IN ONE OR MORE WAYS

Trade Name	*One Way*	*A Second Way*	*A Third Way*	*A Fourth Way*	*A Fifth Way*	*Average Time in Seconds*
Molle	38	26	13	12	10	5.00
Baume Bengue	35	15	12	11	10	4.84
Cailler	27	25	12	8	4	4.28
Delco-Remy	25	22	20	20	7	4.00
Van Raalte	30	26	17	12	9	3.90
Kroehler	31	30	19	7	4	3.54
Ca-Vel	42	26	22	9	1	3.34
Pyrocide	74	10	4	4	2	3.28
Neponset	33	33	29	5	..	3.10
Houbigant	66	14	8	4	3	3.00
Djer-Kiss	52	26	8	6	4	2.97
Bulova	35	31	14	10	6	2.94
Longines	29	17	14	11	9	2.94
Boncilla	47	28	12	5	3	2.71
Kolynos	22	21	21	16	12	2.71
Gargoyl	75	9	6	5	2	2.69
Patapar	40	27	21	9	2	2.67
Del Monte	63	23	6	3	3	2.53
Pinauds	41	30	11	8	5	2.36
Tre-Jur	39	25	23	10	3	2.31
Lavoris	42	25	18	11	2	2.30
Bon Ami	49	21	14	7	6	2.11
Cliquot	48	34	7	4	2	2.10
Pebeco	44	22	21	8	2	2.03
Ipana	50	28	11	7	3	1.96
Socony	64	21	12	1	1	1.87
Mazola	43	26	17	7	4	1.80
Loews	79	14	7	..	..	1.45
Stetson	63	34	3	..	..	1.23
Eveready	100	..	..	..	..	Pronunciation immediate
Chevrolet	100	..	..	..	..	"
Valspar	100	..	..	..	..	"
Firestone	100	..	..	..	..	"
Ivory	100	..	..	..	..	"
Chrysler	100	..	..	..	..	"
Hotpoint	100	..	..	..	..	"
Ford	100	..	..	..	..	"

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artists for suggestions regarding the picturizing of the idea back of the trade name. Tests might be conducted of such picturizations of a name to discover the mark that has the most pleasant meaning and best remembered effects.

Flexibility of the trade name is important, because many firms find that they wish to add new items to their present line. These new items may be given a special trade name as they are added, but such procedure does not capitalize upon the past advertising of the company. One manufacturer began his business with a well-known brand of soap and then added five other related items. Each item was given its own trade name. Thousands of dollars were spent in advertising each. To-day very few people know that these six products are made by the same concern. On the other hand, "Beechnut" has been given to each of their products—gum, ketchup, bacon, etc. Some firms have even gone so far as to change the firm name to that of the trade name, as the Douglas-Pectin Corporation to the Certo Corporation.

Flexibility of a suggested trade name can be estimated subjectively and need not be treated quantitatively in an experiment. In the selecting of a new trade name, it is well to conduct definite tests on the relevancy, recall, feeling-tone, and pronunciation aspects of the tentative names. Of those names which attain the highest quantitative scores, one should be selected and submitted to the Trade Mark Division of the Patent Office for registration.

"Legally, a trade-mark is a symbol, attached to the goods, which indicates their origin, and is capable of being exclusively appropriated for that purpose." The trade-mark may be a symbol, a name, or a combination of the two. The trade-mark or trade-name is a surname that distinguishes all the members of its family from other families of products. "Brand" is a given name that distinguishes one member of a family from other members of the same family. Many people use "Brand" for "trade name" and common usage now permits it. A trade-mark identifies

the originator of the goods. A label identifies the goods. Some of the present rules for registration of a trade-mark are:

1. The name or mark cannot be similar to that of another that has already been registered or has been in sufficient use by another firm to give that firm priority.
2. It cannot be descriptive of the goods or the quality of the goods, as "Shur-On," "Easy-Pack," and "Uneeda."
3. It cannot be the name of a person, unless the person is dead or gives his written consent. However, the names and pictures of deceased rulers of foreign countries may be used.
4. It cannot be a geographical name of importance; nor can an outline map of the United States be used as a trade-mark.
5. A trade-mark cannot be the name or picture of the thing it identifies. The word "orange" or the picture of an orange cannot be used as a trade-mark for oranges.
6. Registration cannot be obtained on an article that is injurious, of immoral values, or has been used to deceive people in the purchase of merchandise.

The fact that a trade-mark or name has been given legal registration is not a guaranty that other firms will avoid using the name or mark. Several years ago, the owners of "Lysol" sent a crew of twenty-two men and women to drug stores in thirty states to purchase Lysol. On this tour, the crew purchased 1,500 substitutes for Lysol. The trade-mark "Lysol" was either written or printed on the bottle's label. Court action resulted in numerous awards for damages to Lysol, Incorporated.[11]

Confusion of trade names.—Infringements of trade names are really difficult psychological problems for the courts to decide. Unfortunately, "the judge, in the exercise of his judicial common sense, settles the rights of the parties as they look to him." In spite of the fact that the

[11] McQuade, Jerry: "Lysol Picks Up 1,500 Substitutes in Thirty States," *Printers' Ink Weekly*, Aug. 25, 1927, p. 173. Reprinted from *Drug Topics*.

judge may be a very wise man, he cannot judge the degree of confusion of many trade names. To know how much confusion exists between two names, it is necessary to conduct a psychological experiment among the buyers of the branded article. Paynter [12] made a valuable start in this direction. In one study he used sixty pairs of litigated trade names. The one list of trade names was shown to observers, one at a time. Each observer was then asked to state whether the trade names of the second list were identical with those he had seen before. Some of the names of the second list were identical with those of the first list; others were imitations. The degree of confusion between the names was measured in terms of the number of cases in which the imitation was mistaken for the original. The following table presents the results of the experiment with nine names for which court decisions had already *been rendered:*

TABLE L

Original	*Imitation*	*Per Cent Confusion*	*Legal Decision*
Sozodont	Kalodont	28	Noninfringement
Nox-all	Non-X-Ell	28	Infringement
Club	Chancellor Club	35	Infringement
Bestyette	Veribest	35	Noninfringement
Mother's	Grandma's	38	Noninfringement
Au-to-do	Autola	40	Infringement
Peptenzyme	Pinozyme	43	Noninfringement
Green River	Green Ribbon	50	Infringement
Ceresota	Cressota	53	Infringement

Trade characters.—Some advertisers have personified their slogans and trade names in the form of a trade character. These trade characters may be classified into two types: trade-mark characters and copy humanizers. Either type tends to inject life into the copy and to add the human touch in a concrete manner. The Bon Ami housewife and Jim Henry are copy characters. Some of the trade-mark characters of American advertising are as famous as our

[12] Paynter, Richard H.: "A Psychological Study of Confusion between Word Trade-Marks," *Bulletin of United States Trade-Mark Association*, May, 1915.

national heroes. Examples are Aunt Jemima, the Cream of Wheat chef, and William L. Douglas.

A common type of trade character or copy humanizer is the movie star who recommends the product in all the company's advertising. Animals, such as the cat, the camel, and the chick, have been used for this purpose.

An advertiser may continue his advertising for many years and use the same stock arguments until he becomes surfeited with the sight of his own advertising. He then adds a trade character and increases the chances for continuity of impression in the public mind. Certain precautions should be taken when a trade character is to be selected. The president of a company or the advertising manager may have on his desk the picture of a bright-eyed son or daughter and then get the inspiration to use his beloved personality as a character to be loved by the customers. In the course of a few years, fashions change and the once lovable character finds itself out of place. For this reason, the character selected should be one that cannot become obsolete or that can be reclothed without straining the memory of the readers. Historical characters, or those that appeal to the "Old South" atmosphere, cannot become antiquated.

Unless a trade character is definitely connected with the trade-mark, the character cannot be legally protected. For this reason it is well to choose a character that cannot be imitated. To prevent imitation, the character can be shown with a dish in the hand or performing some act that will always distinguish it from any imitators.

The facial expression of the character should be chosen with care. Studies of facial expressions indicate that the expression may have to vary with the kind of product advertised. Tobacco, food products, and those which are enjoyed for their own sake should have persons with pleased expressions. A dentifrice and a cold cream do not need expressions that are decidedly pleasing, because the con-

sumer does not use them for personal enjoyment so much as for their health or beauty giving qualities.

Trade characters are occasionally buried by their owners and then revived after several years. The chief reason for their demise seems to be that they become stereotyped to their creators. The board of directors of a corporation often decides to discontinue a trade character because they know him so well. This is a serious mistake. Once a character has been adopted, he should be continued. The executives and directors of a company may know their advertising personifiers so intimately that they develop a contempt for them, but the public prefers the old reliable pictures in the advertising and the labels. A trade character may have to be modernized, but it should never be dropped. Thousands of dollars in advertising have been lost, because the management erroneously decided that they needed something new in their advertising. Few would claim that Tiffany & Company has lost money because of clinging to the same kind of advertising. Once the public becomes acquainted with a trade character, it prefers to keep him, as it has learned to love him. Students of languages have known for many years that the original author of the Cinderella fairy tale did not say that she danced in glass slippers. One of the translators who passed the story to us made a mistake when he confused a French word that means leather with one that resembles a word meaning glass. If the public were asked to change this old story to a more natural condition and have Cinderella dance in ordinary leather slippers, it would rebel. People are suspicious of the strange and the new. Changes must be made gradually and the discontinuance of some of America's advertising characters has been a loss to our business traditions and profits.

Direct mail devices to induce action.—The specialists of direct mail advertising have developed their art more exactly than experts in some other phases of advertising, because its effectiveness can be measured by accurate records. The factors that influence returns often seem trivial to the layman. For example: most writers of day-to-day correspondence fold their letters so that the typewriting is *folded in*, leaving the blank side of the sheet to strike the eye when the envelope is opened. It was found that returns were more than doubled for one firm when the typewriting was *folded out*. In this case, the letter was not processed, but was original typing, and was mailed to men of great wealth.

The folding of the letter might be considered of no importance when executives of a business firm are to receive the letter. However, when 700 questionnaires were sent to offices of large business houses to ascertain whether any mail comes to their desks unopened, 72 per cent replied that all of it does. This indicates that most mail addressed to individuals is not opened by a secretary or a general mailing department.[13] The recipient is also more likely to read the letter before tossing it into the wastebasket if the envelope of transmittal does not have a return address.

Days of the week and weeks of the month when the advertising is mailed tend to influence returns. Mail received on Saturdays and Mondays is likely to get the least attention. Mail received in the first and the last weeks of the month receives less attention than that received in the middle weeks in offices where much mail is handled.

The postage used in sending circular letters has been carefully tested by many firms. The returns vary according to the concern and the type of letter. An advertising man who circularized 2,000 purchasing agents to obtain their subscriptions to a trade journal divided them into four groups of 500 each. The same letter was sent to each group, except for variations in postage and an inclosed stamped or unstamped reply card. The returns were:

[13] Pyke, Don: "Envelosis," *Direct Mail Selling*, April, 1929, p. 7. From a report of the Dartnell Corporation.

	Returns
2-cent postage with a stamped card	3.75%
2-cent postage with an unstamped card	3.25
1-cent postage with a stamped card	4.10
1-cent postage with an unstamped card	5.65

The results did not sustain the generalization that purchasing agents receive so much mail that only the first-class letter will gain their attention. However, this experimenter also tried a processed letter, which was sent to 5,000 prospects, 1,250 in each of four groups. The attempt was made to personalize this letter. The returns were:

	Returns
2-cent postage with a stamped card	7.35%
2-cent postage with an unstamped card	7.00
1-cent postage with a stamped card	5.85
1-cent postage with an unstamped card	5.90

The writer concluded: "If you are sending a circular letter, use one cent; if you are sending a personal letter, use two cents." [14]

The Permutit Company has maintained a mailing list of 10,000 names for several years. Every month this list is circularized. The returns over a period of six years have been unusually consistent. If a mailing piece has been used several months previously, the number of returns can be estimated to within a fraction of 1 per cent. The returns for eight months, when a colored two-cent stamp, private post card was used were contrasted with the returns when a government postal card was used:

December	293
January	269
February	213
March	244
*April	147
May	294
*June	143
July	262

In the lowest two months, April and June, the same letter was sent as in the other months, except that the return card was a one-cent government postal card instead of a

[14] Williams, Russell B.: "One or Two-Cent Postage," *Postage Magazine*, 1923, p. 536 ff.

colored private card with a two-cent stamp affixed. Other tests have been conducted by this company, and, in each case, the returns were less when a plain one-cent government postal card was used for the return inquiry.[15]

Since the government has inaugurated the permit reply card, which enables the advertiser to send out reply cards, but to pay postage only on the cards returned by the inquirers, several experiments have been conducted to test its economy. The most exhaustive test was that of a mailing of 182,000 pieces.

For each of seven consecutive weeks, we set aside 26,000 pieces of mail for test purposes. These 26,000 lots were equally divided between government and permit cards. In each instance the addressed envelope and inclosed material were identical. Even the copy on the two cards was identical, the only difference being on the address side of the card. The permit cards were printed on stock as much like the government postal as we could find.

The 182,000 pieces of mail were distributed to thirty-five small, medium, and large lists. Where a list was arranged geographically, envelopes were addressed and then alternated into two groups. In this way we nullified any advantage one location might have over another. Everything possible was done to make conditions for the 91,000 government cards identical with those for the 91,000 permit cards.

Quotas for these mailings were, as in all our mail-order work, fixed at a definite percentage of cost to sales. When all returns were in, a tabulation was made to determine whether we would continue using the permit card.

The government postals produced a larger gross volume of orders, but when measured in percentage of cost to sales the permit card proved to be the more profitable. Government postals entailed an outlay of approximately $10 per 1,000 cards in excess of the permit card. So, on the basis of costs, we found the permit card 13 per cent better than the government card. Upon this tabulation, covering thirty-five lists and 182,000 pieces, we discontinued using the government postal.[16]

[15] 2¢ Private Post Cards Bring More Replies Than 1¢ Government Postals," *Postage and The Mailbag*, January, 1928, p. 26.

[16] Maddy, C. D.: "Big Mailing Test Proves Business Reply Card 13 Per Cent More Efficient Than Government Postal," *Sales Management*, June 15, 1929, p. 550.

Experience indicates that the number of return cards from direct mail advertising will be increased if the following rules are, in general, obeyed:

1. The return card should be a complete story in itself. It should have a summary of all the essentials of value in ordering or inquiring.

2. It should have a picture of the object advertised. The picture should be that of a person in action with the product and suggest that the user is pleased. Pictures often increase the returns as much as 25 per cent.

3. The return card should be attached to the circular or letter so that it cannot be overlooked.

4. The name and address of the inquirer or customer should be filled in for him.

5. The quality of the paper and distinctiveness of the envelope used in mailing the card influence the returns. Experiments only will determine the most profitable stock, shape, and color of the letter of transmittal.

6. Colored return cards of some individuality are better than white or drab cards.

Color in direct mail.—Color is an important factor of influence in direct mail advertising. The large mail order houses have been able to make accurate estimates of the value of color in their catalogues. One of them found that clothing and rug orders were profitably increased when illustrated in colors in their catalogue, but farm machinery and automobile accessories did almost as well in black and white. One of the most valuable experiments in the use of color in direct mail was a sales letter sent out by James H. Rothschild, Barmon Brothers Company, Inc.

Twelve thousand letters were sent out, 1,000 each of 12 letters. The same copy was used, the differences being in color of stock and use of cuts. The letters were multigraphed and filled in with typewriter to match. The plain white letter brought in 9 per cent returns; the letter on pink stock brought in 26 per cent returns. It is interesting to note that using a blue instead of a white return envelope increased the returns considerably. In

every case the use of cuts of the product brought a substantial increase in returns.[17]

TABLE LI

An Investigation of Color in Direct Mail Advertising

Letter Number	*Quantity*	*Color*	*Cuts*	*Color of Return Envelopes*	*Per Cent of Pull*
1	1,000	White	No	White	9
2	1,000	White	No	Blue	12
3	1,000	White	Yes	White	18
4	1,000	White	Yes	Blue	22
5	1,000	Corn	No	White	14
6	1,000	Corn	Yes	Blue	26
7	1,000	Green	No	White	16
8	1,000	Green	Yes	Blue	28
9	1,000	Gold	No	White	21
10	1,000	Gold	Yes	Blue	34
11	1,000	Pink	No	White	26
12	1,000	Pink	Yes	Blue	48

Color in direct mail advertising undoubtedly increases the returns. The most successful color for most direct mail advertisers of low-priced commodities seems to be pink.

Color preferences for booklets can be estimated from the colors preferred by customers who can choose from a rack of free booklets. The Union Trust Company of Detroit had one booklet bound in stock of ten different colors and placed copies of each color in five panels, strategically located in the lobby of the bank. Each color was displayed fourteen days. The number of booklets of each color taken from the racks were:

Color	*Number Taken*
Dark blue	162
Brown	142
Pale blue	94
Green	93
Light green	88
Yellow orange	87
Cream	87
Lavender	85
Orange	78
Light orange	77

[17] White, Percival: "Advertising Research," D. Appleton & Co., New York, 1927, pp. 553, 554.

These tests convinced us of several important facts. They proved to our entire satisfaction that a prominent display of literature at strategic points, without other advertisements, is sufficient to attract interested attention; that the number of booklets, folders, or other pieces taken by patrons can be stimulated to a marked degree by creating attractive, colorful covers for the material displayed; that simple colors, such as dark blue and brown, have the strongest appeal; and that any advertiser should study and analyze the public preference to learn the most effective appeals.[18]

Fifteen attention-getting devices in magazine advertising.—Hollingworth [19] was one of the first psychologists to classify the devices used to catch attention in advertisements that are published in a periodical. The following incentives to attention are now recognized by advertising experts when they construct an advertisement:

I. Hereditary or mechanical incentives:
   1. Size.
   2. Repetition.
   3. Position.
   4. Line and form.
   5. Isolation.
   6. Color brightness.
   7. Contrast of colors.

II. Interest incentives:
   8. Esthetically pleasing colors.
   9. Novelty.
   10. The comic.
   11. Illustration having:
      a. Interesting human beings, objects, or situations.
      b. Implied action.
      c. Perspective.
      d. Magnification.

When a business man wishes to write an advertisement, he tends to think first of its *size*. Shall it be a full-page, a half-page, or a one-inch advertisement? Other things being equal, the larger the advertisement, the more attention it attracts. However, many small advertisements have greater attention value than the larger ones. Other factors, such as novelty, may be stronger than size. A skillful advertiser can obtain more attention in a small space than an unskillful one can in a large space.

[18] Kerwin, J. F.: "Blue and Brown Prove Best-Pulling Colors for Booklet Covers," *Sales Management*, June 29, 1929, p. 642.
[19] Hollingworth, H. L.: "Advertising and Selling," D. Appleton & Co., 1913.

Repetition refers to the number of times an advertisement is published. The more often the reader sees the product advertised, the more readily will he recall the product. The increase in attention or in recall value does not increase in the same ratio as the number of repetitions. Repetition can also be used within a single advertisement. An example of this occurs when the same trade name or picture of the product is prominently displayed in several parts of the same advertisement.

Position refers to the position on the page and in the medium. The upper half of the page is usually better to gain attention than the lower half. The right-hand page is better than the left-hand page. The position on the outside back cover of a magazine is a preferred position. Other preferred positions are the inside back cover, the page facing the inside back cover, the inside front cover, the page facing the inside front cover, the page facing the first page of the reading matter, the page at the end of the main reading section, the middle spread, and the page facing the end of the most interesting article or story in the magazine. Publishers usually charge extra for these preferred positions.

Line and form are important attention-getters. The shape of the advertisement, the typography, the borders, and the arrows all influence attention. Quite often they form the element of novelty and then they become an interest incentive.

Isolation is merely a term applied to the setting off of one part so that other parts of the advertisement give an added emphasis to the chosen part. For example, if it is desired to have the reader notice the picture of the article to be sold, that picture may be given blank space around

it. If the advertisement does not have any copy, but merely a picture or a trade name, the near-blank page then attracts attention to the article, because it has no competition from type or other illustrations. Its isolation causes it to be noticed.

Colors are used in advertising to such an extent that the layman does not appreciate the painstaking thoughts that have been applied by the artists. The easiest way to catch the reader's attention by color is to use very bright colors. The advertisement that is just one mass of bright red colors is certain to attract our attention, but it may not hold it. Splashing on brilliant colors has been discarded by most advertisers for the more interesting effects of esthetic colors.

Contrast is closely allied to color brightness. Black on white is one of the oldest combinations of contrasting colors in advertising. Other combinations are used, as blue on yellow, red on green, etc. No attempt is made to combine the colors into a pleasing effect, but rather to select colors that clash with each other. When all the parts of a picture, a setting, or a situation are harmoniously arranged, no one part tends to attract attention over the other parts. By shifting one part out of the unity of the whole, that part is at once noticeable. So, in contrast, the aim is to attract attention by the sharpness of the differences, rather than by a pleasant blending, of colors.

The opposite of contrast is obtained by arranging pleasing colors so that an effective blend results. This is the one aim of every artist who wants to paint a beautiful picture. He wishes to have the colors blend into a unified whole that expresses an idea. He does not use one color merely to attract attention to itself by its brightness, nor are colors chosen to clash with others just for the sake of attracting attention. Rather, all the colors and other factors are combined into an integrated whole. The use of colors for brightness or contrast values, as such, are mechanical devices that attract but do not hold attention. Beauty of

color holds our attention. Some of our present-day advertisements are sufficiently beautiful to merit hanging in our art galleries. One reason why few advertisements have pleasing combinations of color is the added expense of printing the extra eight or twelve colors that are necessary to obtain a truly esthetic effect.

Novelty is an attempt to gain attention by an appeal to interest. The novelty may have any one of several forms: printing the advertisement upside down, unusual type, peculiar shapes, grotesque faces, remarkable events, stunts, and catchy ideas. Anything that causes the reader to notice the advertisement because it is different from the others of the medium has the element of novelty. Sometimes advertisers confuse distinctiveness of an advertisement with a selling appeal. Novelty does not sell the article; it merely attracts attention.

The *comic* may be a form of novelty, but it is classed as a separate factor. The number of comic advertisements in modern advertising are comparatively few. Many advertising agencies have rules against the use of comic advertisements for clients, because of the danger involved in their use. Only the most skilled advertisers can use the comic successfully. Its main danger is that it tends to cheapen the product advertised. The great and worth-while things in life are not funny to most people. To use funniness in advertising a product tends to classify it as inexpensive. It is for this reason that advertisers of commodities such as peanuts and paints have used comedy more often than those who sell pianos or porcelain.

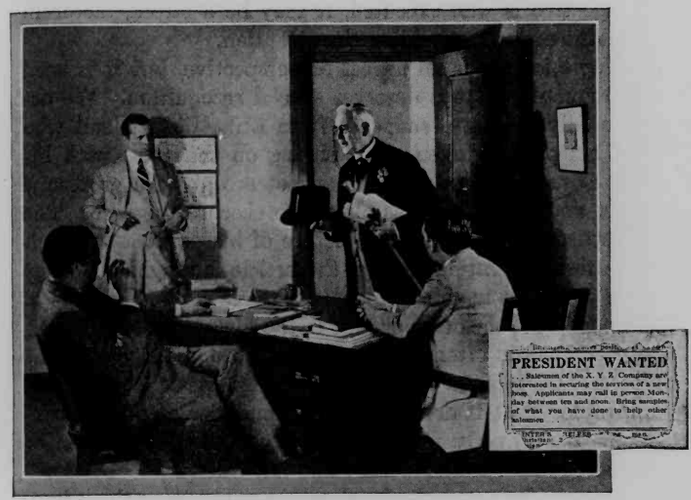
Furthermore, humor is likely to be irrelevant to the main idea in selling the article. It is similar to the lecturer's use of jokes in his speech; the audience laughs heartily but forgets the point or illustrative value of the jokes. The reader of humorous advertisements can remember the picture or joke but not the brand or article advertised. The attention is attracted to the funny situation or joke and the article and its worthwhileness is forgotten or ignored. The new

advertiser who finds that his advertising is neglected by the readers often becomes desperate and resorts to the use of comedy. By so doing, he gets attention, but the attention may have less ultimate value than less spectacular copy and cuts.

The *illustration* tends to be the essence of the advertisement. Most people are pictorially minded. Picture shows are far more attractive than lectures. Pictures were our first written language. They attract and hold attention more readily than cold words. One of the most common problems of the advertiser who uses an illustration is that of its relevancy to the product advertised. A picture of a beautiful woman on a calendar will attract attention to the calendar, but it may not attract attention to the product. However, the effect of irrelevant but beautiful illustrations upon the feeling-tone or attitude of the reader may be very pleasant. The Fisher Body advertisements do not describe the construction or qualities of the auto bodies advertised, but their irrelevancy has a pleasant effect and engenders much good will. Illustrations that are irrelevant to the product, like comedy, attract attention; but they do not always cause the reader to remember the article or brand advertised.

The factors within the advertisement that attract attention are the intrinsic interest-value of the person, object, or situation illustrated. Thousands of people are movie fans; hence, certain advertisers use pictures of movie stars. Children, famous men, baseball games, airplane trips, prize fights, puppies, etc., are of interest to many people, and so the advertiser uses them in his illustrations. If possible to do so, he has action suggested in the picture. In the physical world, a moving automobile attracts attention more quickly than a parked car.

The *perspective* in the illustration often attracts the reader's attention; it may be a close-up, so that the reader feels himself in the situation illustrated or he may consider himself as viewing the situation from a distance. When the



If *the sales force* decided to hire a new boss

IF a sales force were choosing the kind of president who would make their work more productive, these are some of the questions they would ask the applicant:

"Must we devote time in every interview explaining whom we represent and what we sell? Or do you favor the use of printing to break the ice for us?

"Do we have to convince the buyer by spoken words that the firm we represent is able, responsible—quite capable of living up to any obligation? Or do you feel that good printing will create this impression *before* we call?

"Do you want us to explain orally the way our product works, and argue the little technical differences between it and our competitors' merchandise? Or do you think that illustrated folders, booklets, and catalogs can be made to explain these points so clearly that we can get down to the main job of selling the buyer on what we and our product can do for him?"

A good salesman is willing to work under any conditions. But there are ways of making the best salesman's work more effective.

There are a lot of things to be said in every job of selling. But many of them don't have to be *spoken* in the presence of the prospect.

On any of the points listed here, printing carries as much conviction as conversation does.

See to it that your prospects know who you are. See that they know who your man is. See that your prospective customers know what your man sells, what its advantages are, how it is used—and why they should buy it. Your printer will help you do this.

Each year there are more and more firms that depend upon good printing to handle these early steps in their sales programs. So many more, in fact, that the day is not far distant when, after a boss questions the new salesman on what he has sold in the past, the salesman may ask the boss to show him the printing he has furnished to help his salesmen.

TO MERCHANTS, MANUFACTURERS, AND BUYERS OF PRINTING

If you would like to obtain books on the practical use of printed pieces issued free of charge by S.D. Warren Co., write to your printer, asking him to put you on the Warren Mailing List. Or write S. D. Warren Co., 101 Milk Street, Boston, Mass.

Warren's (Standard) Printing Papers

When a printer suggests a Warren Standard Printing Paper he suggests it because he knows it has all the qualities that insure good printing, folding and binding—that it is tested for these qualities before it leaves the mill. Many printers are using the Warren trademark (above) in connection with their own imprint to identify productions on Warren's Standard Printing Papers.

WARREN'S STANDARD PRINTING PAPERS {better paper - better printing}

Fig. 53—An Example of the Effective Use of Interest Incentives in Catching and Holding Attention.

perspective is well executed, it may be a strong factor in catching as well as holding the attention.

Magnification is an aspect of perspective, but it is used so frequently that it deserves special recognition. We occasionally receive a snapshot from a facetious friend who had his picture taken while sitting on the grass with his feet close to the camera. The feet are given a grotesque effect and are so large as almost to obscure the face. The advertiser often wishes the picture of his product to dominate the illustration; hence, the article is magnified or set near the front in so conspicuous a manner that it is out of proportion to the other objects in the picture. For example, tire companies often have a large picture of the tire in the foreground to show the tread. The tire itself is so greatly magnified that it dominates the remainder of the illustration. It may be larger than the pictures of the automobiles, houses, or mountains in the same illustration.

In considering methods of gaining attention, the advertiser should not confuse attention with appeal. The reader's attention must be caught as he pages the magazine, but it must be held by the use of an appeal that is related to the reader's wants. Advertisements may catch attention, hold it, and arouse a desire, but induce no action. Action is brought about through the use of the coupon or similar devices.

A single advertisement may have many of the fifteen attention-getting factors. If we analyze a typical Campbell soup advertisement in *The Saturday Evening Post*, we note that it has size—it is a full-page advertisement; repetition—it has elements that have been used in former Campbell soup advertisements; position—it follows the reading matter. It also has borders, color brightness, contrast, esthetic use of color, novelty in the form of poetry, the comic in the form of impish characters for the children, and an illustration. The illustration has an interesting situation with implied action, perspective that places the soup near one's mouth, and the picture of the plate of soup is greatly magnified. The best advertisements tend to have many of the fifteen possible factors mentioned here. Interest factors are far more effective in catching and holding attention than the hereditary incentives. In general, the poorer advertisements depend upon the use of mechanical factors.

TABLE LII

PER CENT OF ADVERTISEMENTS SAYING, "ASK YOUR DEALER"

Magazine	*Total number of ads studied*	*Number of ads saying: "Ask your dealer"*	*Per cent of "Ask your dealer" ads*
1. The Magazine of Business (System) (Aug. 1927)	59	20	33.9
2. Photoplay (Aug. 1927)	99	18	18.1
3. Saturday Evening Post (Sept. 3, 1927)	118	28	15.2
4. Ladies Home Journal (Sept. 1927)	233	31	13.3
5. Popular Science Monthly (Aug. 1927)	118	15	12.5
6. Pacific Sportsman (Aug. 1927)	78	8	10.2
7. Review of Reviews (Sept. 1927)	126	12	9.5
8. Printers' Ink Monthly (Aug. 1927)	157	14	8.9
9. Advertising and Selling (Aug. 1927)	49	3	6.1
10. Marine Review (Aug. 1927)	85	3	3.5
Total	1,112	152	13.7

The term, "Ask your dealer," is too vague to be effective. Only advertisers and salesmen think in terms of dealers. The public uses the specific terms—grocer, electrical shop, drug store, etc.

Projects.

1. Section 426, Paragraph 6, of *United States Postal Rules and Regulations*, states:

Coupons, order forms, and other matter intended for subsequent use may be included in permanently attached advertisements, or elsewhere, in newspapers and periodicals, provided they constitute only an incidental feature of such publications, and are not of such character or used to such an extent as to destroy the statutory characteristics of second-class publications, or to bring them within the prohibition of the statute denying the second-class rates of postage to publications or to give to them the characteristics of books or other third-class matter.

If an advertiser wishes to use an unusually large coupon or a novel coupon in an advertisement, is it necessary to obtain permission from the Post Office Department for its use before submitting it to a publisher for final publication?

2. Make a collection of advertisements having trade characters. Classify the characters into four groups according to

their facial expression: delighted, pleasant or pleased, dignified, and negative.

3. Obtain copies of several types of magazines. (a) Study the vocabularies and copy style of each of the magazines. (b) List the unusual words which the readers of that magazine might not understand.

4. Ask your friends for words and expressions that they do not like to hear or use. Include slang terms in your list.

5. Associate with persons of different occupations for several days. Describe differences in vocabularies of factory workers, college professors, executives, children, art students, etc.

6. Collect advertisements having coupons. Classify the coupons (a) according to their power to pull a large volume of inquiries, (b) according to their tendency to attract a selected list of prospects only.

7. Select a trade name for a new product, such as a fountain pen. Write a detailed plan of procedure for the selection of the name. List and number the various steps in your technique.

8. (a) What is the effect upon the readers of using a comic trade character, such as a hobo, in advertising a corn plaster? (b) Can the trade character be so interesting or amusing that the reader neglects to learn the qualities or uses of the product advertised? (c) Should the trade character or mark be animated or at rest? (d) Should the names of famous persons, such as prize fighters or channel swimmers, be used as trade names or characters? If so, for what kinds of products?

Chapter XX

Supervising Groups of Employees

Informal Methods

The psychology of the employee.—A professor who is a student of labor problems described the following experience to illustrate one aspect of the worker's attitude toward his job. "The other evening I left my University office after the building had been closed to the general public and students. As I stepped outside, I met the night watchman on his rounds. It so happened that two of the windows in a laboratory had been left open. I suggested to the watchman that he close the windows to prevent harm to the building or to possible experiments that might be in process. His answer was: 'Nope. I don't close no windows. That's the janitor's job. I ain't supposed to do his work.' Yesterday, I noticed that one of the faucets in the same building was leaking badly. I happened to pass one of the janitors and mentioned it to him. His reply was: 'I hain't got nothin' to do with them faucets. That room belongs to the other janitor.' Once I reported a telephone box off in one of the other janitor's rooms and was told that it was none of my business and that I should tend to my own work. Since then I keep my mouth shut unless it's part of my job."

Much has been written about the psychology of the laborer and the above type of incident is often quoted as evidence of fundamental psychological differences between employers or managers and laborers or employees. However, the mental make-up of the employers is the same as that of employees. Both employees and employers have the same mental traits. Their behavior differs chiefly, in that they react to different situations. Some department

heads and high grade executives have been heard to say what the watchman and the janitor said, except that the executives applied the statement to different situations.

We all react to the same person in different ways at different times, as exemplified in our behavior in the presence of a clergyman when he is in church and when we play golf with him. We fit ourselves into the conditions of the environment. Our psychological differences are differences in response, because of the differences in stimuli. However, we might note some of the outstanding characteristics that seem to be more typical of employees than of managers. Some of these differences are important as guideposts in influencing groups of workers.

1. Industrial employees are of lower general intelligence than the managers. In the studies of army occupational intelligence levels, as shown in Figure 26, it was evident that unskilled laborers, as a group, were of definitely lower intelligence than the skilled workers, the skilled workers were of lower grade than the office workers, and the men of managerial ability were of the highest grade. In intelligence, the corporals in the army were slightly above the privates; the sergeants, above the corporals; and the lieutenants, above the sergeants. Of course, many privates in the army were of higher intelligence than some of the colonels, but the masses of each class differed appreciably. These differences in intelligence should be recognized by executives when dealing with factory and office employees. The employees have a limited view of business. They cannot appreciate the problems of management and they develop distorted convictions of the operations and profits of business.

One of the easiest ways of making a satisfied employee dissatisfied is constantly used by the paid labor agitator. His conversation with the contented employee is of this variety:

"Well, Bill, how much you makin' on this job?"

"Oh, not so bad. Made nine dollars yesterday."

"That ain't bad for your job, but think of what the company made on that. Them gears you cut yesterday will be sold for $122 to the customer. You see what you get. Look at what they get. Figure it out for yourself. Is it right?"

The majority of industrial workers are so low in abstract intelligence that they have no appreciation of the costs of producing and selling commodities. They know little or nothing of the expense of selling, advertising, financing, managing, etc. They estimate costs in the most naïve manner. To them, the purchasing power of the dollar, wages, and politics are the result of the capitalist's machinations or "big business."

2. The industrial worker "feels" much and reasons little. He cannot reason, because of lower capacity for reasoning and because he has not the facts from which to reason. His elemental impulses and emotions must govern him. The job is to him most important. He is not so greatly concerned about the nature of the job as the fact that he has a job. For this reason he tries to have the job last as long as possible. He may not hurry, even though he may be full of energy that he would prefer to let loose on the job. He believes that the less he produces, the greater will be the number of jobs available to other workers. When his job is displaced by a machine that is far more productive than he or his gang, he cannot understand the justice of his misfortune. The academic economists may tell him that increased production means a higher standard of living for the masses of people, but that is offering him a stone when he asks for bread. He is lost in the changes being wrought by the new American tempo. To himself, he appears to be tossed about as driftwood on the turbulent sea. Can we blame him? When the War was over, the government had to rehabilitate some of our veterans. It is probable that, eventually, we shall have to set up rehabilitation bureaus to readjust the veterans of industry to the changes of our times.

3. Industrial workers have a group consciousness. They are loyal to their fellow-workers. They recognize a gap be-

tween themselves and the executives and professional workers. Many of them are descendants of men who were grossly mistreated by executives of a generation or two ago. Some of the old men who recite their tales of abuse were treated cruelly by perhaps but one employer. Yet that one unfair employer becomes a symbol of employers in general. As with all of us, the dramatic instance outweighs an overwhelming array of opposing figures. Horrible accidents to fellow-workers knit the others closer together. Poverty and mistreatment of workers in other parts of the world arouse a sympathetic feeling and accentuate the group consciousness. Need we marvel that the labor union leader is a welcome messenger? He would be far more welcome now if jobs were more plentiful.

This group allegiance does not mean that an executive should judge employees according to one standard and his associates by another standard. Rather, the executive must treat employees as associates and raise them up to where they can understand some of the problems of management. We do not develop children into strong adults by keeping them only with other children and treating them as children. No, we prepare them for adulthood by gradually treating them as adults and by giving them grown-up problems and situations to meet. A similar policy guides the business leader who merits his position and wishes to meet his responsibilities to society and future business prosperity.

4. The industrial worker has few means or little grasp of recreational or esthetic interests that are greater than his own immediate conditions. The artist, the philosopher, the poet, the inventor, the musician, and others can munch dry bread in a cold attic and find life worth while. Not so the laborer. Profanity and obscenity are the easiest outlets for his pent-up feelings and inexpressible longings. For him, the job that provides food and shelter for himself and his family is the mainspring of his existence. In recent years, the automobile and the radio have placed him on a recreational par that approximates that of the executives who

direct his efforts. Perhaps our schools will soon give the youth a philosophy of living and a spiritual interest that will be of more value than the drudgery of parsing and the finding of the greatest common divisor.

5. Life is filled with insecurities for all of us, but especially so for the man whose sweated brow marks his position in the industrial and social scale. His job is insecure in the presence of the "robots" of business, the many mergers, the possibilities of ill health, and the whimsicalities of executives whose word is law. The worker is not blind to these ever-present menaces to his job.

One winter afternoon, the writer called at the office of a personnel manager of a large industrial firm. During our pleasant chat an elderly working man came into the office, with tears in his eyes, and said to the executive: "I know I didn't do what I should 'a' done, but I'm willin' to do the right thing. I'm sorry." He took his discharge slip and left. This workman was a skilled worker who had taken excellent care of the company's many elevators for twelve years. That morning he came to work as usual, but one of the main elevators that transported factory employees happened to be out of order. He worked feverishly to get it repaired. While he was working, various employees kept ringing the bell in spite of the card that hung at the shaft on each floor which stated that the elevator was out of order. In the midst of his labors, some one continued to ring the bell. Exasperated, he yelled several words of profanity up the shaft to the "boob" who kept ringing the bell. The "boob" happened to be one of the company's young executives, and the repairman was immediately discharged. Hundreds of incidents of this type happen every day and we shall always have them, but the workman who sees or experiences them realizes the insecurity of his job, and he sometimes harbors a bitter feeling of injustice when he notes how his job is lost while the executive is smiled at when he smashes his golf club merely because the ball sliced into the woods. His feelings are most bitter when he be-

lieves that he may be spied upon by hired company detectives who are disguised, or when he imagines that a discharge places him on a black list. To such a worker the whole scheme of society and industry is unjust.

6. Responsibility or more important work is surprisingly seldom desired by the lower ranks of workers. The worker does not feel any too certain of his present job. Why should he seek more difficult problems? When he reads about "the heights by great men reached and climbed," as captains of industry are described in the inspirational magazine articles, he does not see any relationship between the efforts of those masters and his own position and opportunities. Like all human beings, he rationalizes and believes that "pull" is what lifts all men above the lower rungs of the ladder. He sees no chance of breaking through. True, he knows that he could attract the attention of the boss by working a little harder or a little longer than his fellows, but that would brand him among his friends as a "bootlicker," a "sucker," or a "tool of the capitalists." Moreover, he may have tried it once and have done the wrong thing and the boss may have given him "hell" for his well-meant efforts. Besides, some of the old men of the shop who have grown gray in the company's service seem to be getting just about the same pay that he is getting.

7. The corporation and business as a whole is personified in the foremen who are over the employees. The workman has no profound philosophies or attitudes regarding the splendid service that his company and he are rendering society by the work that is done in the shop. The part he plays in the manufacturing of the company's product is so isolated and infinitesimal that he cannot idealize his labor. His job has no halo. He does not work for an abstract principle but for a very ordinary foreman who is just as human as he. To the factory employee, the company is "but the lengthened shadow" of the foreman. Psychologically, the worker is in a state of readiness for a precipitating stimulus that will give an outlet for his dammed-up

feelings. The foreman may be an able man, but he is in a dangerous position. His simplest criticism of error when handling a workman may release an accumulation of feeling or action that is wholly out of proportion to the seriousness of the foreman's offense. Truly, the foreman needs much training for his job, in order that he may fulfill his function in one of the key positions in industry.

Labor's propaganda.—In view of the situation in which the laborers find themselves, it is only natural that they should organize and present their side of the question to the public. As a form of self-expression, they need the lobbyist, the labor union leader, the printed matter, and the great eruptive protest—the strike. Employers have their trade associations and their representatives in legislative halls. Laborers need the same tools, if they wish to compete with the employers who hold the strategic position in disagreements with the individual workman and organized groups of workers. And labor has developed a fairly extensive scheme of propaganda. True, it is not so formidable as it might be if it were well organized, but it is worthy of note.

According to one survey, the number of copies of industrial relations propaganda distributed to workers monthly was 4,300,000 promoting union labor interests, 2,000,000 promoting radical interests, and 100,000 promoting employers' interests.[1]

Many executives fail to recognize the wide distribution of trade-union publications. Many of their articles are of an inflammatory nature. The appeal is to the worker's emotions. Their efforts, as a whole, are probably helpful to business in the long run, because the employer needs a thorn in his flesh to keep him awake. A mild quotation on monthly get-together meetings follows:

> These monthly meetings are also held to discuss grievances. None are ever discussed, however. How in the world can you insult your host? How are you going to talk sour to the people

[1] "Waste in Business," The Parker-Holladay Company, 1927, p. 5.

that invite you and your sweetheart to a dance and refreshments afterward?

At the baseball game it is baseball. At the basketball game it is basketball. At the smokers it is prize fights and dirty jokes. There are no grievances.

The company, however, fosters the myth of direct contact between the workers and the bosses. It tells the workers that they can see any boss any time they want to if they have something on their chests they want to get rid of. So can a buck private see his captain—after he has seen his corporal, sergeant, second lieutenant, and first lieutenant.[2]

The following is taken from the report of an organizer and published in the union's official organ:

In connection with the fight against the nonunion ——— Tea Company, Delegate ——— of the same local addressed the Chicago Union Label League, saying to the delegates: "This bread price reduction is only possible through reduced labor cost and this concern, it is true, is paying starvation wages to its employees working in its bakery shops. Therefore, when you buy bread at the reduced price offered in these stores, it does not come out of the profits of the company but out of the life and blood of its employees. I want the delegates to know that the ——— stores are still on the unfair list of the Illinois State Federation of Labor and the Chicago Federation of Labor and that the Bakers' Union is about to launch an active campaign against this company and throughout the State." [3]

The labor organizer deals with the workman's most vital interests. He is a better student of labor psychology than the employer, for the organizer directs his appeals to the worker's problems and interests. The employer depends upon his power of discharge and shut-down to protect his interests rather than upon a study and integration of labor's desires with his own aims.

In spite of the many excellent and effective efforts of the unions, they have promulgated certain principles that are incompatible with psychological facts. They have tried to enforce equal pay for all members of the union. They have

[2] "What the Labor Press Is Saying," *Nation's Business*, May, 1927, p. 116. From "Industry's Poor Relations." in the *International Moulders' Journal*.
[3] "Odds and Ends from the Battlefield," *The Bakers' Journal*, Feb. 25, 1928, p. 2.

tried to regulate the productivity of each worker and to keep the output of all members the same. Their justification has been that of equality of time given by each worker rather than his output. The psychological violations of individual differences have been well summarized in the following statement:

If, then, unionism is to survive, it must adapt itself to the facts of the psychology of individual differences. It must make a place for ambition and initiative. It must enable the intelligent and the capable man to pass in the economic race the man who is unintelligent or incapable or slothful. To summarize: there are four principles which must be adopted by unionism if it is to be made acceptable from a psychological point of view. First, there must be no restriction to individual effort; each man must rather be encouraged to do his best. Second, compensation must be sought on the basis of work accomplished rather than on the basis of time served. This means compensation according to ability and effort. Third, there must be no restriction on the number of apprentices. Every man must be equally free to attempt a given kind of work. Fourth, promotion must be on the basis of merit rather than on the basis of seniority.[4]

A few employers have attempted to combat labor's propaganda with propaganda of their own. They have purchased weekly bulletin services which send a supply of standardized posters to be tacked up in the shop where the workers can read them. An example of these posters is a picture of marching men with one man out of step. The caption reads:

Everybody out of step but SIMP.
He's always right—He says so!
There's a lot of Simps in this world. (*sic*)

The publishers of gaudy posters, bulletins, and pay-envelope stuffers of this variety make platitudinous appeals to "Team Play," "Hard Work," "Loyalty," "Promptness," etc. They consist of catch phrases and generalities that are

[4] Ellis, Robert S.: "The Psychology of Individual Differences," D. Appleton & Co., 1928, New York, pp. 486, 487.

purchased because the management is too busy to study the employees and consider their specific needs. It saves trouble to give them a kind of bromidic barrage.

Fig. 54—This illustration is a copy of a painting that hangs in the general office lobby of the American Rolling Mill Company. All employees who had been employed a certain number of years were photographed and a composite photograph was made. This composite was used as a guide by the artist in painting the figure of the "Armco Spirit." This principle of honoring the older employees of a company can be used in many ways by the management that wishes to develop morale among the workers.

Another example of this variety of propaganda is the sending, by the employer, of special "magazines" to the homes of the workers. The workmen are not solicited for subscriptions, because the employer pays for them. The magazine bears a name which suggests that it is for the workmen and the address is some distant city. The workmen do not know who has put them on the mailing list until they happen to mention the magazine to fellow workers, and then they suspect that the employer is doing it. The articles are largely paternalistic and decidedly capitalistic. The employers are always right and the workmen are always wrong, according to the magazine. Industry is pictured as being beautiful and capital as being kind, and workmen ought to be happy and contented. Few facts are given, but many opinions are offered. Needless to say, such surreptitious material should not be used by an upstanding employer. He can more profitably concentrate his efforts upon dealing with the specific problems of the individual employees. The personnel department can be given extra help, in order that a personnel inventory may be made of the needs and wishes of each employee of one or more departments. A personnel inventory will result in the development of more constructive devices, such as systematic training courses.

Legitimate methods of telling the employer's side to labor.—The management of every plant uses some means of imparting the company's directions, wishes, and reasons why the workers should be kindly disposed toward their employer. Some of these channels of distributing information to employees should be given careful attention by the management.

The bulletin boards are necessary to most plants. However, in many firms, they are performing the function of wastebaskets. Notices are allowed to accumulate on them for months. Employees decorate them with witty remarks and cartoons. Hence, when an important notice is posted, it is likely to be neglected by the workers. To make the

bulletin board of value it should be painted, inclosed in glass, and lighted. The inside of the board should have a number of brass nails upon which small colored boards can be hung. Each bulletin should be tacked to one of these colored boards, and, as the colors are changed, they gain attention for the new notices. Several headline boards should be prepared for special types of notices, such as "Read the bulletin to-day," "The cause of an accident," "See our national advertising," "What our competitors are doing."

The bulletin board should have photographs to illustrate the principles of safety. Broken goggles and old shoes may be displayed if they have played an important part in an accident. Human interest pictures of employees who have caught a big fish while on a camping trip, the bride and groom of a recent plant marriage, and valuable suggestions made by employees are examples of items that can be posted. The bulletin board should never be used for sermonizing by the general manager. It should be kept inviolate for the interest and information of the employees. As a rule, all notices should be changed every three days.

Company picnics, banquets, dances, plays, and other events for the pleasure of the employees should be wholly given over to such pleasure. The management should not attempt to give any talks that boost the company. Few things are so annoying to the employees as being compelled to sit and listen to a hired spellbinder harangue them on the "family spirit of business" while they anxiously wait for the entertainment to begin. Years ago, all stories for children had a moral tacked on the end. As parents once did, so many managers still deem it their duty to moralize to the employees in return for the company's entertainment. On these occasions of amicability the aim should be to give the employees so joyful an experience that they will be glad they are working for their particular employer. The associations with the job should be so pleasant that they consider themselves fortunate to be working there. Dances

and plays should not be held at regular intervals nor too frequently. They should be spaced far enough apart for the employees to anticipate them rather than to go to them as a part of their obligation to the company. No time should be given to politics or to religious problems at any employees' meetings.

Moving pictures can be made less entertaining and more or less educational. It is seldom well to invite all the personnel of factory and office to see a film. It is better to appeal to definite groups. The invitation should state the nature and purpose of the film or meeting in order that the employees will not come expecting to see a wild west picture and find that they are being given a pictorial description of the sources of the raw materials used in the manufacture of the product.

The employees' magazine or plant organ should be conducted for the benefit and interest of the employees, but a small part of it can be devoted to a frank statement of the company's position. At least 70 per cent of the copy should deal with personal items such as athletics, marriages, births, deaths, and promotions, relative to the employees' lives. The copy should not talk down to the employees nor make them conscious of being members of the working class. The subject matter should be *we* and not the *company.* The management should inform the employees of some of the company's problems and conditions. New orders, installations of new equipment, certain costs of producing and selling the products, and the allocation of the company's income dollar can be presented. Whenever the manager or the president has an impulse to preach to the employees, he should be big enough to ask the advertising manager and personnel director whether his article is merely a sermon or a worth-while mental food. These executives should also be free to express frank opinions to their superior officers regarding suitable material for the magazine.

According to a study of 500 house organs by the National Industrial Conference Board, 428 periodicals were described

as "employee magazines." Of those published in the preceding three years, 53.2 per cent, directed to employees' interests, were still being published; 34.8 per cent had been discontinued; and the character of the remaining 12 per cent had been changed. The high mortality was attributed to a lack of understanding of the functions of the medium and a lack of definite editorial policy.[5] In view of the need for a better appreciation of the management's problems by the employees, the employees' journal should have great educational as well as entertaining value. Most employees believe that advertising is a waste of money and that their wages could be raised if those funds were added to the wages. Many think that orders are easy to get, that any business can borrow plenty of money, that the government could operate all businesses more cheaply than private concerns, that there is a fixed amount of money in the world, and that factory workers have all the "grief" and office workers all the "snap" jobs. Such erroneous impressions should be corrected by factual articles with convincing data, as well as by emotional statements. All the material in a plant paper can be made as interesting and as attractive as the company's advertising, if the periodical has a sound policy and the advertising department collaborates with the personnel department in fulfilling the policy of the plant organ.

Displays of the company's products have much educational value if they are displayed in an informative manner. To put some of the products in glass show cases in the lobby has little value, because most of the factory employees never step into the general office lobby. Such displays should be located where employees congregate. They should include placards which show why the product is made in certain ways, its points of superiority, the costs, the fluctuations in sales, and the pictures of the men who are responsible for the improvements. Practically all this information

[5] *Nation's Business*, May, 1926, p. 112.

is given the salesmen; but, for some reason, executives seem to be afraid to tell the factory employees the same facts that are freely presented to prospective purchasers of the product.

Irregular training courses can be given selected groups of employees, such as foremen, machinists, and salesmen. The chief points that are apt to be overlooked are the systematic organization and aims of the courses. Many executives begin such courses without planning more than the first two or three meetings and then allow the matter to drop without an application or summation of the material. Where it is deemed burdensome or expensive to have a training course within the plant, it is possible to study the needs of individual employees and to recommend to them suitable correspondence or evening school courses. When college professors or other outsiders are invited to come into the factory and give special courses, it is well to have the instructor outline the course in advance and to state his attitude toward capital and labor. A few of these teachers are snobbish toward workingmen and others are unable to appreciate the problems of management. The fact that they are connected with a well-known institution does not always guarantee the usefulness or objectivity of their instruction. Experience indicates, however, that the employees or the executives within the company are seldom capable or desirous of conducting courses of training for the employees. As a rule, trained teachers are required.

The passing of the strike. What next?—Industrial disputes have been decreasing in the last decade. The Bureau of Labor Statistics has been keeping a record of strikes and lockouts since 1916. The present record includes only those disputes that involve six or more workers and last for one day or more. No distinction is made between strikes and lockouts. Index numbers, on the basis of 1916 as 100, show the following fluctuation in disputes from 1916 to 1928:

TABLE LIII

1916	100	1921	63	1926	27
1917	117	1922	29	1927	19
1918	88	1923	41	1928	17
1919	96	1924	33		
1920	90	1925	34		

The major causes of disputes were wages, hours, and union recognition, these three causes accounting for 69 per cent of all disputes.

Of the 656 disputes ending in 1928, 272, or 41 per cent, resulted in favor of employers, whereas only 26 per cent were so reported in 1927. The number settled in favor of employees in 1928 was 197, or 30 per cent, while the number compromised was 160, or 24 per cent.

Of the 656 disputes ending in 1928, 130, or 20 per cent, were settled by arbitration, although the differences of only 4 per cent of the 402,706 workers involved were settled in this way.[6]

The membership in labor unions has decreased as well as the number of strikes. Is labor becoming a partner rather than an antagonist of capital? Are workmen more contented than they were ten or fifteen years ago? The answers cannot be demonstrated by statistics; but it is probable that laborers have, to some extent, acquired a more coöperative attitude toward management. Some workmen are more contented than they were a decade ago, but the main causes of labor's present quiescent state are economic changes. The shifts that have taken place in the numbers of employees in various occupations have been from manufacturing to distribution. The factories and railroads have installed and are still installing labor-saving machinery. Thousands of coal miners are idle because oil is cheaper than coal for many establishments. When workmen are being dropped from the pay roll while others are already unemployed, there is little incentive to strike. To strike when the employer would welcome a shut-down or be stimulated to install more labor-saving equipment would bring no gain to the laborers. They appreciate this to a greater extent than they realize.

[6] "Number of Industrial Disputes in 1928 Lowest in Years," *Domestic Commerce*, July 29, 1929, p. 51.

In spite of the fact that the individual workman cannot understand the justice of the scheme when he loses his job because a more productive machine takes his place and the places of a dozen friends, the more productive workers are living on a more luxurious plane than have any of their ancestors or predecessors. Unskilled and skilled laborers can drive automobiles and tune in on their radios, because efficient management has displaced some workers with more able machines. When the workman can live, or thinks he does live, on almost the same plane as his employer or supervisory executive, the gap of dissatisfaction tends to narrow.

Our American workman can see the same scenery from his flivver, play golf on the same municipal links, send his daughter to the same high school, send his son to the same state college, attend the same moving pictures, hear the same radio music, and do many other things that his boss and employer does. That is, if he has a job. Moreover, no man is permanently fixed in the climb toward the positions of greatest prestige and remuneration. In spite of the fact that the older and the lower grade of worker may feel that "pull" is necessary to get up the ladder and that fate has been unfair to him, yet, he hopes and believes that his son may some day sit in one of the seats of the mighty. Others have done it, why not his son and his daughter? So long as the worker can dream dreams and see visions for his children and his successors, he cannot be molded as clay in the hands of the labor organizer. So long as the management keeps the door of opportunity open to a selected able few, so long will the workman be difficult to lead into many outbreaks of passion as a revolt against the scheme of things. So long as the management continues to recognize the fallacy of cutting wages to lower costs and prefers to pay high wages in order that more people may be in the market to buy the articles, so long can we anticipate a happy industrial state. Our most acute problem is that

of placing the workers who are displaced by machines rather than placating those who are operating the machines.

The percentage of criminals who went into crime because they could find no honest work is probably quite negligible. But the percentage of men who have gone into bootlegging and similar forms of petty criminality because they have a taste for a higher standard of living than they can pay for honestly is probably appreciably high. Our acute social and industrial problem may become one of enabling our people with prodigal desires to achieve satisfaction by honest means. Or must we check the momentum of their desires? Or can we give them a taste for the richer but simpler beauties of life? Will our big problems of the next decade consist of fewer industrial difficulties and of more acute and widespread social menaces of crime, ambitions beyond possibility of attainment, and personal vices? Have our former respect for law and our reverence for the religious been taken away without our accepting new guides in their stead? Are these questions merely academic peregrinations, or must they be answered by the business and other leaders of the none too remote future?

Assuming that business leaders must seriously consider these dire prophecies as imminent problems to be solved, what hopeful trends are now in process which may remove or answer some of the questions? The picture for the future is not wholly dark. It has several bright spots, even though the spots are very small. The criminals and the insane are increasing rather rapidly; to some people, alarmingly so. Science seems to be lagging in its contributions to prevention and cure. But science works slowly and takes much time to "gird up its loins" before it runs a race. The psychologist has developed a single principle that should be and may be of great value, namely, the adjustment of the individual to the problems of his living. *Face reality* has become his slogan. It is being preached and taught by the leaders in child training. If it permeates the rank and file of public school teachers and parents, so that they learn

how to teach children to apply it as the prime art of living, we shall find that many of the difficulties now on the horizon will be solved before their harmful effects are felt. If sociology can develop a group-consciousness, whereby we all recognize our obligation to be moral because of our dependence upon the welfare of the group, much trouble will be avoided or overcome. If philosophy can learn to give the citizen of "Main Street" less epistomology and a more hopeful and satisfying understanding of his universe and the scheme of things, life will be worthy and worth while for the worker and his family. The business manager is now in the position of leadership in the transitional changes that are gripping us to-day. Does he have the acumen to understand whither his machine age is leading his fellows and himself? Will he be able to adapt himself to the momentous forces he has placed in motion or will he, like the workers displaced by his machines, also be displaced to make way for a new type of leader? Only history will answer; but, at least, he can be on the lookout and set his own house in order. He can manage his business and direct his employees according to the best scientific and human standards of the present. He can learn to deal with the immediate situations with the best tools at hand. His labor relations will test his leadership of the future, but the present can be given the best techniques that have been evolved through the personnel problems of other managers. He must acquire the best tools of research, as the methods of objective study bid fair to remain the one reliable answer to all our difficulties. Rule of thumb can be modified by careful experimentation.

Projects.

1. When an employee has a disagreement with an executive, it is possible for the executive to settle the conflict by any one of three methods: forceful submission, compromise, and the integration of the employee's desires with the needs of the company. Give examples of the application of these three methods of

meeting industrial conflicts or disagreements between an executive and the employees.

2. Collect parts of commercial services for the development of the employee's good will and evaluate them.

3. Would the morale of the employee be improved by holding employee meetings where some of the older men of the company describe their experiences and advancements with the company?

4. In one company the coal bill had increased 30 per cent when the board of directors ordered an investigation. The chief fireman reported that he had been shoveling more slate than coal. He knew that the coal was inferior, but he did not think it was his place to report it. Analyze this situation as to possible causes of such an attitude on the part of the employee. How can such attitudes be prevented?

5. Andrew Carnegie wrote his epitaph for himself:

Here lies a man
Who knew how to enlist
In his service
Better men than himself.

What attitudes are necessary for an executive to pursue such a policy?

6. How can the management convince the employees that "pull" is not essential for promotion?

7. Collect copies of employees' magazines or plant organs and analyze them as to style, selection of material, illustrations, size, et cetera.

CHAPTER XXI

Supervising Groups of Employees

Formal Methods

Welfare work.—Some employers who have been doing welfare work are trying to change the term to remove the stigma attached to it. Samuel Gompers once labeled it "Helfare Work." Other terms which are in use are "Mutual Interest Work," "Social Service," and "Service Activities." A definition of the term might be that it "consists of all those things that the employer does for the benefit of employees, the doing of which does not make a direct contribution to production or profits." Activities so classified are athletic associations, dramatics, bands, parks, playgrounds, summer camps, dances, picnics, banquets, insurance, sick benefits, lunch rooms, vacations with pay, loans for emergencies or home buying, health services, visiting nurses, swimming pools, and pensions. Suggestion systems and training courses should not be considered as welfare work.

Welfare activities usually do not arise as the result of any scientific studies of what the employees of a company need. When various industries are investigated in regard to their forms of welfare work, as reported in Table LIV, one finds that the work is unstandardized. One reason for this has been the fact that a particular variety of welfare work is inaugurated, as a rule, because one of the most responsible executives prefers that kind of activity. If the president of a company is also one of the heaviest stockholders, and he likes baseball, the company is likely to have and support a baseball team. If the manager of another concern of the same industry prefers to bowl, that company will tend to have bowling teams. Sometimes the activities for the

women employees are determined by the preferences of the president's secretary. Many of the older executives of corporations have a fatherly affection for their employees and give their employees what they themselves enjoy. Some of the old and successful heads of businesses feel that they have all the money they care to have, but they want to reimburse their employees who have helped to make the money. To raise their pay without raising their responsibilities would be unpardonable, as labor should be paid for at the current market rate. Hence, it is natural to show their appreciation to loyal employees by doing pleasing friendly acts for them.

TABLE LIV

REPORT OF INDUSTRIAL RELATIONS SURVEY OF GROUP METHODS OF DEALING WITH THE EMPLOYEES OF 66 INDUSTRIAL CONCERNS IN A NEW YORK STATE CITY OF 200,000 POPULATION

Number of industrial concerns investigated 66
Average number of employees in each factory 262
Per cent of employees foreign born 18.1
Per cent of employees unskilled 22.5

A. Welfare activities:

1. Do you grant vacations with pay to factory foremen? No, 21. Yes, 45.
   Number of companies that pay 2 weeks 23
   Number of companies that pay 1 week 17
   Number of companies that pay 10 days 1
   Number of companies that did not specify 4
2. Do you grant vacations with pay to office workers? No, 7. Yes, 59.
   Number of companies that pay 2 weeks 44
   Number of companies that pay 1 week 7
   Number of companies that pay 10 days 1
   Number of companies that did not specify 7
3. Do you pay office workers for legal holidays? No, 13, Yes, 53.
4. Do you give your employees the benefits of group insurance? No, 39. Yes, 27.
   All employees covered by group insurance 24
   Office help and foremen covered 1
   Optional with individual employee 2
5. Do you have a pension system for your employees? No, 58, Yes, 8.
6. Do you have sick insurance for your employees? No, 37. Yes, 29.

TABLE LIV *(Continued)*

REPORT OF INDUSTRIAL RELATIONS SURVEY OF GROUP METHODS OF DEALING WITH THE EMPLOYEES OF 66 INDUSTRIAL CONCERNS IN A NEW YORK STATE CITY OF 200,000 POPULATION

7. Do you require a physical examination of new employees? No, 51. Yes, 15.
   Number of companies requiring examination only when hired 11
   Number of companies requiring annual health examinations 4
8. Do you have an employees' mutual benefit association? No, 46. Yes, 20.
9. Do you have an organized savings plan for the employees? No, 60. Yes, 6.
10. Do you have an athletic organization of employees? No, 49. Yes, 17.
11. Do you have an athletic field of your own? No, 60. Yes, 6.
12. Do you have organized recreation for your male employees? No, 57. Yes, 9.
13. Do you have organized recreation for your female employees? No, 52. Yes, 14.
14. Do you have moving picture shows for the employees? No, 57. Yes, 9.
15. Do you have an annual company picnic? No, 44. Yes, 22.
16. Do you have a company paper or magazine for employees? No, 60. Yes, 6.
17. Do you have a cafeteria or lunch room where employees may purchase prepared foods? No, 52. Yes, 14.

B. Relations with labor unions:

1. Is your plant "open shop" or "closed shop"? Open shop, 65. Closed shop, 1.
2. Do you have contracts with labor unions? No, 60. Yes, 6.
3. What per cent of your factory employees are members of unions? None, 58. Ten per cent, 1 plant. Twenty per cent, 2 plants. Ninety-eight per cent, 1 plant. Not specified, 4 plants.

C. Wages:

1. What per cent of your employees are paid on a day-rate basis? All employees, 20 plants. More than 50 per cent of employees, 18 plants. From 10 to 50 per cent of employees, 10 plants.
2. What per cent of your employees are paid on a piece-rate basis? Fifty per cent or more, 8 plants. From 10 to 50 per cent of employees, 19 companies.
3. Do you have a bonus system of payment for factory workers? No, 58. Yes, 8.

TABLE LIV *(Continued)*

REPORT OF INDUSTRIAL RELATIONS SURVEY OF GROUP METHODS OF DEALING WITH THE EMPLOYEES OF 66 INDUSTRIAL CONCERNS IN A NEW YORK STATE CITY OF 200,000 POPULATION

D. Hiring of employees done by:

Employment man	28 plants
Superintendent of factory	16 "
Foremen of factory	10 "
Others	12 "

E. Methods of training new employees and apprentices:

In the company's school	7
A trained instructor	1
Foreman of the department	9
Experienced employees	19
No plan or system	30

Another cause of welfare activities is that of doing the expected thing. If some employers of a community give the women employees silk stockings for Christmas, then it may be advisable to induce those employers to stop doing so or to do something better. Most executives wish to see their employees happy and contented. The husband who sends his wife flowers has not made a careful investigation of her needs for flowers at that time, but wants to do something for her and flowers occur to him. He likes to see them on the dinner table or perhaps he believes that all women like flowers, hence, he may as well express his affection or desire to maintain good will in that manner. Our personal kindnesses are not rational in our home life, nor are they in our business family relations. We may expect welfare activities to continue to be illogically chosen.

The employee, like the wife who receives the flowers, accepts the welfare work offered as a matter of course. The wife assumes that she deserves some little consideration. The employee also assumes that he deserves good working conditions and more than the agreement specified when he was hired. If large sums of money are spent for welfare work, the employees may express a desire to have it in the form of higher wages. Such requests cause the kindly disposed employer to think that his generosity is not appreciated by the employees. At least, the employer often gains that impression when he finds an employee who breaks the fixtures in the rest room or refuses to go to the annual picnic. Such disinterested employees should not cause him to regret the money he has spent, as we cannot expect all the employees of a firm to enjoy the same activities.

A varied program of welfare work seems to be one essential for the satisfaction of the group. However, before any large sums of money are spent for club houses or ball diamonds, it is well to allow the employees to express themselves freely regarding their preferences. They may want a program quite different from that of the key executive. The employees should request and plan their welfare activities. They and not the management should be responsible for the success of the program, although the management must assist in financing and supervising a well-organized program of social services. In a study of 81 companies having employee-representation plans, the service activities were conducted as functions of the management in 22 plants, of employees alone in 2 plants, of a joint committee of management and employees in 34 plants, and in miscellaneous ways in the balance of the plants.[1]

The expenditure of large sums of money for welfare work is hardly justifiable economically or psychologically. The management is obligated to supply pleasant working conditions, which are a part of progressive business, such as vacations with pay, rest rooms, physical examinations, insurance, and possibly pensions for some. Money spent beyond these customary provisions should be diverted into channels which are directly profitable, such as training courses, improved methods of work, or new inventions.

Certain forms of welfare work are increasing while other forms are decreasing. Vacations with pay for industrial workers seem to become more popular each year. The National Industrial Conference Board found that, of 4,655

[1] Kimball, Dexter S.: "The Rise of Industrial Democracy," *Management and Administration*, January, 1924, p. 49.

companies, 1,058 give vacations of some kind with pay. Sixty-three per cent of the companies with paid vacation plans pay in advance of the vacation.[2]

The great majority of companies that have such paid vacation plans commented favorably upon them. Quantitative data to support these reactions are not available, but the usual claim is a reduction in labor turnover. Many of the plans are based upon length of employment, and a worker may hesitate to quit where he is certain of a vacation and start in another place where he must earn the vacation by length of service. Vacations also tend to reduce absenteeism, where the length of the vacation is based upon the regularity of attendance. Relief from monotony and strain of work with renewed vigor are also given as reasons for favoring vacations, but an important factor is that vacations with pay are a prerogative of the executive and office workers. When a factory worker is given a vacation he is lifted to a higher plane in the industrial scale. His ego is fed. Apparently, vacations for industrial workers will increase, whereas baseball teams and bands will decrease.

Mental factors in accident prevention.—Miss E. M. Newbold made a study of 16,188 accidents in 22 British factories having 6,938 men and 2,024 women. She found that personal susceptibility is a far more material factor in accident causation than is generally supposed. All workers do not have an equal start with respect to proneness to suffer accidents. Some are more likely to suffer casualities than others. She found much evidence to indicate that the bulk of accidents may occur amongst a limited number of individuals who are naturally unable to avoid accidents. She also found that the number of accidents tended to decrease with age and that minor accidents and minor sicknesses correlated positively.[3]

This investigation agrees with American experience in

[2] *Executives Service Bulletin*, Metropolitan Life Insurance Company, July, 1928, p. 2.
[3] *National Safety News*, August, 1926, p. 39. From "The Human Factor," by E. M. Newbold, H. M. Stationery Office, Kingsway, London, W. C. 2, England, 1926.

safety work. In a study of Boston motormen it was found that about one in ten of the men having records of frequent accidents were "accident-prone," because of physical or mental handicaps or specific faults of operation of which they were unaware.[4]

We are safe in concluding that the worker who has had several accidents has not "learned his lesson." Such workers are more apt to have more accidents than those who have had no accidents. They should be transferred to less risky occupations. Nor can we say that if a person has not had an accident for ten years that he is about due for one and should take out additional accident insurance. Such a person has proved his ability to exercise care and avoid accidents.

Many accidents are also caused by the presence of a daredevil employee. He sets the pace for the taking of chances and carelessness. His discharge in certain factories has reduced the accident rate even though all the other employees were allowed to remain.

Dr. H. W. Heinrich made a study of 73,000 industrial accident cases to determine their origin. He recognized only two basic causes: accidents subject to supervisory regulation, and accidents arising from mechanical or material hazards. It was found that the mental and the moral attitude of the employer and the employee were at the root of most industrial accidents. He designated 88 per cent of the causes of all accidents as supervisory and 10 per cent as physical, both within the power of the employer and the employee to remedy. He allowed only 2 per cent as being nonpreventable.[5]

It is interesting to note that the skillful worker has fewer accidents than the less skillful worker. Maximum productivity and minimum accident rates tend to correlate. Production can be increased at the same time that accidents are reduced. In fact, maximum productivity is ordinarily

[4] *Mental Hygiene Bulletin*, March, 1929, p. 2.
[5] "Executive Responsibility for Safety," *Manufacturing Industries*, August, 1928, p. 302.

secured only when accidents tend toward the irreducible minimum. Very dangerous physical factors may be removed or reduced in a factory and accidents will continue if the attitude of the management and the employees is disinterested or antagonistic toward safety. Such employees will remove guards around machinery even though they know that the act endangers their lives. Experience demonstrates that the psychological aspects of accident prevention are most worthy of attention if the management wishes to approach the irreducible minimum of accidents.

Employee representation plans.—For many years, managers of the larger firms have been seeking a plan whereby the employees would take a personal interest in the problems and the success of the business. The former friendly contact between master and workman of the guild workers decreased as business became larger. The resultant effect upon the employees has been that each workman assumes that he must do his own work according to the requirements set for him, but no more. If faucets leak, he has no sense of responsibility for them, so long as the faucets are not a definite part of his job. If raw materials are wasted, he has no sense of responsibility toward their recovery or care. In general, he works *for* rather than *with* the company.

Employee representation plans vary in their organization and scope; but their main characteristic is that they attempt to give the workmen, through their chosen representatives, a voice in the active management and in the discussions of managerial affairs. The joint management scheme of the Works Committee or Shop Council is one of the newer developments of industry, but has grown rapidly in the last decade. It is probable that at least one thousand plants in the United States have an employee representation plan of some kind. The Cleveland Chamber of Commerce asked each firm of the district having eighty or more employees for information regarding employee representation. More than 75 of the 600 companies claimed to have some form of such representation. It was found that the

approximate minimum number of employees for schemes of this sort was 300, as the management can keep in personal contact with a lesser number of employees. However, some firms of even smaller personnel have used it. The maximum number of employees for the use of such plans has not been found, as the need for the organization seems to increase with the number of employees.

The purposes of the plans are to provide better means of coöperation and understanding between employees and the management, to provide means for the adjustment of grievances, to prevent causes of employees' grievances, to impart to the employees the problems and conditions of the business, and to develop confidence and good will. Very few of these councils concern themselves with managerial policies, financial details, or any organized methods of improving production. They deal with problems of shop discipline, discharge, working conditions, wages, and welfare activities, but chiefly with the adjustment of grievances. In a study of the functions of joint management in 81 companies having such a plan, the distribution of management functions [6] was as follows:

TABLE LV

DISTRIBUTION OF MANAGEMENT FUNCTIONS IN 81 PLANS FOR EMPLOYEE REPRESENTATION

Managerial Functions	*Management (M)*	*Employees (E)*	*A Joint Committee of M and E*	*Other Plans*
Wages and hours	14	1	61	5
Working conditions	5	1	69	6
Discipline and discharge	27	1	44	9
Adjustment of grievances	1	1	72	7
Service activities	22	2	34	23
Managerial and business policies	78	0	0	3

The Industrial Representation Plan of the Standard Oil Company of New Jersey went into effect April 1, 1918. During the first fifteen months the plan was in operation,

[6] Adapted from a study by Wm. Filene's Sons Co. and presented by Dexter S. Kimball in "The Rise of Industrial Democracy," *Management and Administration*, January, 1924, p. 49.

141 different matters were discussed and settled, in most cases unanimously. The range and importance of these topics is indicated in the following analysis:[7]

	Per Cent
Wages	33.0
Working conditions	11.4
Promotion and discharges	10.6
Hours	10.0
Method of wage payments	6.4
Industrial representation plan	10.0
Sanitation	3.6
Housing	3.6
Social	3.6
Miscellaneous	7.8

The plans differ very widely in their functions, powers, procedure in conducting business, and constitution. Most of the plans are flexible, so that they can be modified to fit changed conditions within the plant or the industry. Some confusion arises from a lack of uniform phraseology and agreement regarding the structure and limitations of the plans. James Myers has classified the existent plans according to the amount of power they possess, as follows: (1) those with advisory powers only; (2) those where arbitration machinery is provided; (3) those which grant representation on the board of directors of the company; (4) those which recognize and coöperate with unions.[8] The plans which have grown up outside the activities of organized labor and as joint employer-employee undertakings may be divided into two groups according to structure:

The first, the so-called "Industrial Democracy" or "Governmental" type, borrows its terms from and is imitative of the Federal form of government. It provides for an organization of three bodies—a House of Representatives composed of duly chosen employees; a Senate consisting of foremen, supervisors and minor executives, and a Cabinet to which the higher executive officers belong. In actual practice no two of the so-called Governmental types are absolutely identical. Many of them do not have all three bodies: House, Senate and Cabinet. They do

[7] "Employee Representation Plans," Metropolitan Life Ins. Co., Report No. 67, p. 19.
[8] Myers, James: "Representative Government in Industry," George H. Doran Co., 1924.

not necessarily elect their representatives on a similar basis or provide for functions to be performed in any given manner. A plan may have both House and Senate and also provide for joint committees to perform certain specific tasks. On the whole, under this plan, however, the work of the different divisions is carried out separately, rather than through joint committees. Examples of this type of representation exist in the Riverside and Dan River Cotton Mills, William Demuth Company, Sidney Blumenthal & Company, the Packard Piano Company, the Printz-Biederman Company, and the Goodyear Tire & Rubber Company.

In the second or joint committee type of organization, which is the more common form, a group of employees and management representatives, generally equal in number, meet regularly or upon designated occasions to settle their joint problems. Such meetings afford a clearing house for different opinions and points of view. The Colorado Fuel and Iron Company, the Bethlehem Steel Corporation, the Dennison Manufacturing Company, the Procter & Gamble Company, and the International Harvester Company employee councils are all organized on this plan.[9]

The essentials for the successful inauguration and operation of an employee representation plan are that the management must have the attitude of friendliness, sincerity, and deep interest in the basic soundness of their employees in particular and workmen in general. The management must be just as concerned about the loyalty of the company to the employees as about the employees' loyalty to the company. The attitude of putting it over on the employees may give only the outward appearance of a plan of representation; "the letter killeth but the spirit maketh alive." One general manager thought that he had employee representation when he had a model plan written and posted on the bulletin board, but he called all the meetings himself, selected the topics for discussion, and then claimed that he could get the employees to do anything for him that he wanted. It was true that they always voted the way he wanted them to vote. He was an excellent boss, but not a leader of men, nor did the employees have any representa-

[9] Employee Representation, "Employee Representation Plans," Policyholders' Service Bureau, Metropolitan Life Insurance Co., p. 7. Report No. 67.

tion worthy of the term. Another general manager thought that he had employee representation when he appointed, as a committee to represent the employees, the factory superintendent, the personnel manager, and himself. Fortunately, most of the managers of modern business who inaugurate such plans recognize the gravity of the situation and do make an honest effort to play the game fairly and in good spirit. Where this has been done, the general experience indicates that the plans have been successful, but the form of the plan is of little importance in comparison with the spirit back of it.

Most of these plans have developed, in the natural course of events, as part of a safety organization, social club, or other employee group. This is better than to thrust the plan upon the employees. Much time should be given to the preparation of the plan. The employees must be consulted and allowed to take an active part in its organization, the writing of the constitution, and the preliminary work involved in the first election. They should be made to feel that it is their own plan and that they want to operate it fairly and enthusiastically. Needless to say, such a plan should not be inaugurated during an incipient strike, as a palliative for labor trouble, or as a substitute for inefficient management in the shop.

The plan should be in written form and available to all employees. The proceedings of the meetings should be given sufficient publicity so that no false rumors can develop. The scheme and its operation should be so simple that any normally intelligent employee can understand it and what it means to him and for him. The plan should be arranged so that the employees have the privilege of free discussion, with and without the presence of the management.

The benefits of coöperative management schemes lie in their power to build morale among the employees. Employees and executives become acquainted with each other and obtain a better understanding of the other's points of

view and problems. The grappling with mutual problems has a sobering effect upon the employees. The energies that may have been dissipated in childlike talk about the profits of business, the ease of management, and the unfairness to employees tend to disappear. To some extent, management can be relieved of trivial details, but the company that installs such a plan for this purpose is apt to be disappointed. To explain to and to convince employees requires far more time than arbitrarily to tell them what to do. A mutual discussion of problems by the company and the workmen cannot help but have a beneficent effect upon production, morale, and labor turnover.

One of the shortcomings of joint management plans is that the powers of the employer are apt to be more or less limited. Unless the employer is willing to go all the way with the scheme, he should never start it. If he does start it, he will find that the employees will not always render a decision in his favor. In one company where the employees dealt with 154 cases, 132 of them were decided in favor of the employees. However, the employer need not fear that communists, agitators, or unbalanced individuals among the employees will stampede the men into unfair decisions. Experience indicates that the best types of workmen are elected to represent the employees and that they take their offices seriously, consider their problems carefully, and endeavor to render decisions that are just and impartial.

The meetings of the employees do consist of a lot of talking. Trivialities are discussed for hours and many of the sessions appear to get nowhere. However, the criticism of talking is not limited to employees' meetings, as some of the meetings of boards of directors and legislative bodies are accused of the same characteristic. If the problems discussed by the employees appear to be important to them, they should be allowed and encouraged to talk them out.

Labor unions are not favorably disposed toward joint management schemes, as the unions believe them to be substitutes for their own bodies. The worker who is a member

of a union is a member of an organization that includes all workers of all firms where his craft is employed. The employee who is a member of an employee representation body has no outside protection in legislation or in influencing the employer from without. A few of the joint management plans do have provision for coöperation with the labor unions, but the probability is that at least 95 per cent have no such affiliation. The extent to which the joint management schemes of industry have offset the appeal and power of the labor union is difficult to estimate. We can only surmise that a relation does exist between the two, as labor unions have been decreasing in membership and the shop committees and works councils have been increasing. The future of the competition between the two is problematical, as the first articulated plan of employee representation was begun in 1912 when "Industrial Democracy" was organized by John Leitch for the Packard Piano Company.

Sharing profits with employees.—Profit sharing is not a new idea, as the plan was in use in agriculture in England in the thirteenth century. Records show that it was used in shops as early as 1842 in France and 1870 in England. The first plan instituted in the United States was that of Albert Gallatin in his glass works at New Geneva, Pennsylvania, in 1794. In 1889, the United States had 32 recorded schemes for profit sharing. Most of these schemes were short-lived, although one St. Louis firm has been operating on a profit sharing basis since 1886. The Procter & Gamble plan was begun in 1887, but it has been modified several times since then. Seven others which are now operating were started previous to 1900. However, most of them have been in operation for less than twenty years. In Great Britain, of 519 plans known to have been started before 1925, only 252 of them were still in existence.[10]

Profit sharing should be distinguished from bonuses, which are given as a reward for high production or sales of

[10] "Sharing Profits with Employees," Policyholders' Service Bureau, Metropolitan Life Insurance Company, Report No. 91.

an individual worker. It is not part of a wage system. True profit sharing is an agreement between the employer and the employees wherein the profit allocated to the workers rises or falls in proportion with the increase or the decrease in the profits realized by the employer. The method of distributing the profits varies, but the general aims are the same.

The plan is not limited to any type or size of business concern, as many of the firms who are using it have less than 100 employees. About three-fourths have less than 500 employees.

Most of the plans have been started in the hope that efficiency would be increased, costs would be decreased, and the working force stabilized. Some were begun by aged employers who wished to share their successes with their employees who helped to earn the money and to develop successful enterprises. Their motives were an attempt to give social justice and to increase their own sense of well-being. Where such an attitude prevailed, when coupled with reasonable managerial efficiency, some benefits would accrue from profit sharing or any other plan of employee relations. The plans started by the heads of businesses whose humanitarian impulses induced them to install profit sharing have tended to be abandoned at their death when inevitable changes in management took place. In a few instances, the owner of the business provided for the perpetuation of his plan after his death. The most notable example of this latter type is that of one of the leading department stores in Paris where the plan was begun in 1840.

In general, profit sharing has not been so successful as had been anticipated by many of its advocates. Of the British plans that have been discontinued, the average length of life was eight years. The principal reasons for terminating them were: financial reasons, 25 per cent; change of management, 15 per cent; dissatisfaction of employers with results, 43 per cent; opposition of employees,

6 per cent. There are, however, many plans that have been markedly successful, among them Clark, Nicholls and Coombs, Ltd., which in thirty-four years distributed nearly £500,000 among employees, and the South Metropolitan Gas Company plan, which has been in operation thirty-six years. The British gas industry is very largely organized on a co-partnership basis, under which employees not only share in the profits but also advise in the management.[11]

The United States Department of Labor studied 26 plans that had been discontinued. The reasons given for discontinuance were:

1. Plan did not satisfy employees.....8
2. Men went out on strike.....5
3. Men preferred increase in pay.....5
4. Plan did not increase efficiency.....4
5. Plan benefited undeserving employees.....2
6. Plan did not tend to increase stability of force.....1
7. General upward trend of wages and competition.....1

Profit sharing has not been hailed with delight by the majority of workers. They prefer to have a definite salary or wage that is known in advance. Their resources do not allow them to maintain their accustomed standard of living on a basis whereby they can withhold or pay for their purchases at the end of the year when profits are declared. "A bird in the hand is worth two in the bush." In the years when the company makes unusually high profits, the money distributed is accepted as a gift from a kind industrial Santa Claus, but when profits are negligible or a deficit must be written on the books, the employees may be sorely disappointed. To receive two hundred dollars profits each year for several years and then find that the profits are discontinued suddenly may be a shock to the employee who has spent the anticipated extra income. When profits are large, they are often confused with or considered as a part of the wages.

[11] "Sharing Profits with Employees," Policyholders' Service Bureau, Metropolitan Life Insurance Company, Report No. 91.

When profits of the company do not allow any distribution to employees, the employees tend to suspect the honesty of the management. This is particularly apt to occur when they note that the president of the company or the general manager has purchased a new house or limousine. They do not, as a rule, have access to the accounts of the employer, and, if they did, they would not be able to understand them. A negligible number of the employers who have a profit sharing plan has provided for the auditing of the company's books by a disinterested accountant who presents his report to the employees. However, the great masses of workers cannot understand how profits are made or computed in modern business. It is only natural that they should be suspicious of the management when the plan of distribution must remain a mystery of the employer's bookkeeping system.

The individual employee cannot see any relationship between his own daily efforts and the profits at the end of the year. In most plans, the profits divided are a small fraction of the annual wages. In one-third of the plans studied, it was found that the dividends amounted to less than 6 per cent of the annual wages of the participants. Hence, when the interested employee decides that he will work hard because he will share in the profits at the end of the year, he will find that the lazy worker by his side receives a check that is just as large as his own. During the following year he will tend to work as slowly and as carelessly as the poorest workman by his side. Profit sharing tends to bring the efficiency of the best workers down to that of the poorest rather than to raise the poorest up to the highest. The profit sharing sun shines just as brightly on the undeserving as the deserving. It is for these and other reasons that profit sharing for workmen has been found wanting. The only type of profit sharing which appears to have intrinsic worth for modern business is that of managerial profit sharing.

The making of profits in modern business is largely be-

yond the control of the factory workers. Profits depend upon the managerial ability to purchase economically, organize the whole scheme of production efficiently, sell the goods at a satisfactory profit, and finance the operations during the depressions that are bound to occur in business. The key executives of a business—sales manager, production manager, comptroller, purchasing agent, and a few others—can see the direct relations between their own efforts and the profits made. They are the men who are responsible for profits and losses rather than the workers in the factory.

Most of the important executives of a company are placed on a fixed salary. They know that they are getting the highest salary that the board of directors will give them. From that standpoint they have no incentive to do their best and so they tend to lean back and take life more or less easy. This easy attitude is not intentional or even conscious, but the situation is of such a nature that they are not stimulated to do their utmost. They constitute the one group where profit sharing is of direct motivation. They know that their efforts are a vital factor in causing profits or deficits. To allow them to share in the profits stimulates them to do their best and gives them a feeling of partnership and responsibility in the business. Profit sharing for executives has immediate intrinsic values. For wage earners, it is merely incidental to a humanitarian or managerial attitude of fairness toward the employees.

Employee stock purchase plans.—As profit sharing for employees has waned, selling stock to them has increased. Under profit sharing the wage earners had a little to gain but nothing to lose. The profits were handed them without demanding any definite expenditure from them. In the case of selling stock to an employee, he must pay for it out of his regular earnings and he can see a definite relationship between payments and returns. Furthermore, he is given a feeling of self-importance. He is now a financier.

Stock has been sold to employees to give them a sense of ownership in the business and as an incentive to eliminate waste, to be more industrious, to attend work regularly, to hesitate to quit for a better job, to criticize the employer less, and to refuse to harm the company's property in case of a strike. By purchasing enough stock, the employees could have direct representation on the board of directors and in the management of the company.

The growth of the movement is indicated in the data reported of a survey of dates of inauguration made by the National Industrial Conference Board:

TABLE LVI

Year	*Number of Companies*
1900 or earlier	3
1901-1905	14
1906-1910	13
1911-1915	30
1916-1920	111
1921-1925	162
1926-1927	17

The installation of such plans can now be looked upon as a comprehensive movement that has eclipsed profit sharing, and that may have a profound influence on employer-employee relationships. In some cases the employees as a group constitute the largest, or next largest, stockholder.[12]

The distribution of stock to employees is in line with the general tendency toward wider holdings of securities. In 1900 the American Telephone and Telegraph Company had 7,535 stockholders. To-day it has about 350,000. Hundreds of other companies have sought and obtained a wide distribution of their securities. One estimate places the number of workers in the United States who own stocks at 2,000,000.

Some of the stock purchase plans are open only to selected employees, such as managers, department heads, salesmen, or others whose services are highly respected or who can afford to stand a loss in case of a decline in value. The class

[12] "Employee Securities Purchase Plans," *Manufacturing Industries*, October, 1928, p. 462.

of security and the kind of employees to whom it is sold was indicated in the above-mentioned survey of 358 companies.

TABLE LVII

Class of Security	*Rank and File of Employees*	*Selected Employees*
Common stock	144	26
Preferred stock	161	4
Special employees' stock	11	..
Bonds	11	1
Total	327	31

What are the benefits of employee stock ownership? Have employees, in general, become better workers because of their holdings? At present, the great majority of employee-owners of their employers' securities are pleased over their holdings. Whether this satisfaction will continue is a matter of conjecture. Several companies, most notably the F. W. Woolworth Company, have discontinued selling stock to their employees, because most of the satisfaction that has arisen from stock ownership has been beyond the control of employers and employees.

The mass of employee stockholders do not have a true appreciation of the meaning of stock ownership. Many of them buy the employer's stock because they want to have some kind of a savings plan, to please the foreman, or to make some money the way somebody else did who happened to own some stocks that rose in price. If the stock of most employees should drop, they would consider it as a reflection on the company. When stocks have fallen below the price paid by the workers, they have felt that the company took advantage of them. A case actually occurred where an employee purchased stock at $130 a share and, when he needed money, sold it for $380 a share. That should have satisfied any person who speculated in stocks, but the price afterward soared to $540 and the employee became angry and blamed the company for his "loss."

To minimize the possibility of loss to employees, several companies have had to form a kind of investment trust. Actual losses to employees have taken place in only a few cases; but, when they occurred, the employees could not understand the true situation. The employer was considered responsible.

The most important fact is that when employees have purchased stock they have not looked upon themselves as part owners of the business. They preferred to consider their accumulated savings as a form of pension or nest egg for old age. Much of the appreciation that has come from stock ownership has been the same as the satisfaction that results from ownership of any savings fund that offers protection in old age. If nonfluctuating stocks can be sold to wage-earning employees, such investments may be very desirable for them as a thrift plan. When stocks of more fluctuating prices are sold to employees, the employees should be of the most intelligent class, because they are mentally capable of understanding the possibilities of variations in price.

Suggestion systems.—One of the common methods of inducing employees to analyze the problems of management is to stimulate them to study their own work. The same energy which the employee dissipates in biased criticism of the company can be directed into positive channels. The Newport News Shipbuilding and Dry Dock Company conducted a campaign of seven weeks for suggestions to be made by any or all of their 5,300 employees. About one fourth of the 2,800 suggestions submitted were of practical value, and 232 were adopted at an estimated annual saving of $80,455 to the company.[13] It is seldom that more than 30 per cent of the suggestions submitted have a cash value, but many companies pay for them if they have an indirect value. The General Electric Company has taken a definite interest in employees' suggestions and the following table indicates the scope for one year:[14]

[13] A description of the details of the Waste Campaign outlined in this article is given in *Manufacturing Industries*, June, 1928, pp. 93-98.

[14] "Bringing Out the Geniuses," *The Saturday Evening Post*, Aug. 15, 1925, p. 44.

TABLE LVIII

Average number of shop employees—eleven plants	55,412
Percentage of shop employees making suggestions	22
Total number of suggestions considered	12,217
Total number of suggestions adopted	3,244
Total amount of awards	$39,531
Estimated savings to result from suggestions for 1924	$442,792

So far as the employee is concerned, the cash award may be merely the beginning of his remuneration, as the quality of suggestions enables the company to select men for special kinds of work or for promotion. In the large corporation, the employee is apt to be lost in the confusion of activities; but if he is very ambitious and competent he can lift himself out of his niche by developing valuable ideas. To operate a successful suggestion system, the management must do more than merely hang up a few tin boxes with a sign, *"Suggestions Wanted."* Considerable managerial thought and effort are essential in operating a suggestion scheme. The most commonly accepted rules are:

1. In small concerns, it has been found best to conduct a contest for suggestions. The contest should start and end on definite dates. The announcement should include a statement of the rewards for each accepted suggestion and the prizes for the best suggestions. The disadvantage of this method is that awards cannot be made until all the suggestions have been considered and many require lengthy study and investigation.

2. In the larger concerns, they find it better to conduct the campaign throughout the year and prizes are awarded at definite periods or the suggestions are paid for when accepted or put into effect.

3. It is well to obtain the coöperation and good will of the foremen and other executives. Many a department head considers an employee's suggestion for improvement as a reflection upon his ability. This really is not true, but foreman lethargy and company politics can be quite effective in throttling the variety and richness of employees' suggestions. To prevent this condition, some companies request all suggestions to be submitted on a standard three-part form. Each of these three parts bears the same number. The largest part of the form is reserved for the description of the suggestion, the two smaller parts for the name of the employee and the number of the suggestion blank. When the suggestion form is submitted, it is first sent to one of the higher officials of the company who tears off the parts which include the name of the employee. He files one part in a private safe and the other part is mailed to the employee with an acknowledgment of receipt and appreciation. He is also told when the suggestion will be given its first hearing by the committee in charge. By using this plan the committee does not know the name of any of the suggesters and therefore, it is easier for them to avoid unfair personal influences.

4. The announcements and requests for suggestions should explain to the employees the kind of suggestions that are desired. Lever Brothers Company's form states:

> We especially invite and welcome suggestions which will:
>
> 1. Reduce the number of accidents and make for greater safety of employees.
> 2. Improve the method of manufacture.
> 3. Increase production.
> 4. Improve the appearance of the goods.
> 5. Reduce the number of motions or the amount of unnecessary fatigue.
> 6. Make better industrial relations.
> 7. Be good for advertising merchandise.
> 8. Assist general maintenance.
> 9. Give methods of reducing or eliminating waste.
>
> Remember that all suggestions which are adopted will be paid for in cash.[15]

5. When suggestions are considered by the appointed committee, complete records of proceedings should be kept in order that copies of the minutes and other records may be submitted to the management. Each item of business must have an identifying number, in order that all activities of the committee can be traced. Monthly and annual

[15] "How to Get Suggestions from Employees," Policyholders' Service Bureau, Metropolitan Life Insurance Company, Report No. 80.

reports can be made from the proceedings of the recorded meetings. These are then available for guidance when the same suggestion is submitted by other employees. The general foreman or superintendent in charge of the suggesting employee should be informed of all suggestions that are made from his department.

6. When a suggestion is rejected, the reason for it should be recorded and the employee should be given a written explanation. The general executive in charge of the employee or a member of the committee should discuss the rejection with the employee, in person, in order that he may understand why his suggestion was not acceptable. Few things will cause a suggestion scheme to die more quickly than to ignore or to forget the employees who make the suggestions. The personality and manner of the rejecter is of vital importance. It may stimulate the employee to submit additional ideas or it may cause him to feel chagrined for his past efforts.

7. The employee should have the right of appeal when his idea has been rejected. If he cannot be convinced that his idea is valueless, he should have the privilege of preparing new charts, drawings, or evidence of its worth.

8. The awarding committee should have, as members, several employees. The employees will then know that they are represented in the determination of awards. If this is not done, some of the employees may be convinced that the company has stolen or will steal some of the brilliant ideas submitted by them.

9. The awards or rewards should be in proportion to the value of the idea. To demand a waiver of rights for a patentable idea is certain to prevent the flow of suggestions. If the suggestion has little cash value to the company, the reward may be small, but it is dangerous to give only small rewards of one or two dollars. If no one receives more than five dollars, the employee who received an award may be joshed by his fellow-workers, as "Well, Sam, are you gonna' buy a new house and car with that two dollars and

a half that the company gave you for your bright idea?"

10. The employees who make the best suggestions should be given publicity in the plant paper, on the bulletin board, or at a general meeting. A few firms give no financial reward for accepted ideas, but consider promotion, prestige, and personal pride a sufficient reward. Such a policy is dangerous, as it stimulates the sycophants rather than the more balanced personalities.

Suggestion systems, like all other group methods of influencing employees, depend for their success upon the attitude of the management toward the employees. The cordiality of relations between employer and employee is more potent than any scheme of employee representation, stock ownership, or profit sharing. The writer had the privilege of being an employee and owner of stock in the company that had history's biggest drop in the price of employee stock. Hundreds of employees lost their savings. Some had borrowed money to buy their stock. Yet, the majority of employees did not hate the company. They calmly regretted the loss and wished they had not bought it. The reason for their remarkable attitude was the fact that the founder and head of the company had their confidence. They believed in him, and, after the crash, many asked for the privilege of working for him at any salary he cared to pay. Happily, the magnificent spirit of many of these employees was rewarded later, because this leader of men vindicated his position and made a financial come-back. With such a man at the head of a business, the methods of handling employees are merely supplementary to an able personality. Employee morale is not built by any particular system of dealing with the group, but by constant frankness, sincerity, and intelligence, from all the supervisory executives and especially from the chief executive.

Projects.

1. A statesman once said: "If you would love man, you must not expect too much of him." How does this apply to the manager in his relations with employees?

2. Stock ownership and other welfare plans tend to succeed more readily when they are built from the bottom up rather than when handed down from above. Make a list of the distinguishing characteristics of these two managerial approaches to the problems of industrial relations.

3. To what extent is the employer responsible for the continued employment of the type of employee who is described as follows:

a. Employed by present employer fifteen years.

b. Several years ago his work changed, but employee has not been able to adapt himself to the changed conditions. The management has been unable to transfer him to a vacancy of the same rate of pay.

c. Employee refuses to accept a demotion with a lower rate of pay.

d. Employee is married and has three children. His character and personality are excellent.

4. Describe the employee relations plan of the A. Nash Company, Inc., Cincinnati, Ohio. What changes have taken place in employee relations since the death of Arthur Nash, the sponsor of the "Golden Rule" plan of management?

5. Managers of industrial plants claim that accidents are contagious. One source of the contagion is the dare-devil employee who challenges employees to take chances. Name other sources of accident contagion.

6. Some companies who instituted weekly social affairs for office employees found that the scheme had far too many disadvantages. Why are such plans likely to fail?

7. What are the advantages and what the disadvantages of the traveling cafeteria in the factory, whereby milk, hot dogs, and sandwiches are sold to workers during working hours?

8. One of the country's leading manufacturers of a highly technical product receives about forty letters of suggestion daily. One expert examines each suggestion for possible value to the company. Several years of experience indicate that 6 of every 1,000 suggestions are of value to the company and are adopted with profit. On the other hand, the manager of another company refuses to consider any suggestion from employees unless the suggestion has been worked out to a final conclusion. How could the wishes of this manager be integrated with the ideas of the employees in order that the second company might have the same benefits as the first company?

Chapter XXII

Supervising Women Employees

How the executive acquires his attitudes and opinions regarding women.—Most of our opinions of psychological differences between men and women are not the result of scientific observations, but of incidental contacts or conversations. Every business man has had the unpleasant experience of finding himself in situations where he had to listen to the telephone conversations of women who were talking with each other about trivialities that appeared very important to them, but which dealt with such subjects as clothing, "dates," movie heroes, and other unimportant topics. It is for this reason that some executives find it necessary to prohibit social conversations over the telephone during working hours. However, the differences in conversation have been studied more or less scientifically. Dr. Carney Landis of Wesleyan University listened to casual conversations in three cities—London, New York, and Columbus, Ohio. He made notes on the spot and tabulated the subjects under various headings. Money and business led the list of men's conversations. "How's business?" was the subject discussed in 35 per cent of the conversations of the men in London, 48 per cent in New York, and 49 per cent in Columbus, Ohio. If two women were talking, 5 per cent of the conversations in London, 3 per cent in New York, and 12 per cent in Columbus dealt with business. When men were talking together, they tended to discuss amusements and sports to the extent of about 15 per cent of the conversations; when women were talking they tended to discuss men. In New York, 44 per cent of the confidential chats of women with each other dealt with men, and 23 per cent of the conversations between New York women

concerned clothing and decorations, whereas men gave far less conversation to clothing.

It is probable that men also acquire patterns of behavior toward the opposite sex from early childhood experiences. The boy who is reared by a mother and several older sisters often has an antagonistic attitude toward women, with the result that when he marries he tends to oppose anything that his wife suggests. The individual executive's attitude toward women employees may often be discovered in the study of his childhood environment, as his early contacts with the females of the family and school have definitely conditioned him toward women. Quite often the executive also develops a defense-mechanism toward women employees, as the result of some unpleasant experience that he had when girls first became very attractive to him. If, during his youthful courting days, he found that he had a tendency to give way to a strong but abhorrent sex impulse, he may have learned to control himself by a frigid manner toward women in general. This would be apt to happen, especially if he had an unpleasant experience with the opposite sex wherein he was socially disgraced, or in case he was connected with some situation where he might have been disgraced had his conduct become known to his superiors and associates.

Emotional differences resulting from physiological differences.—Of course, the main structural differences between men and women are those related to sex. These differences between sexes, with their special social regulations, probably do cause some emotional disturbances. Occasional tragedies result through the failure of men to understand that women do not react as they themselves do to certain situations. One significant difference between the sexes is the intensity of the sexual impulse. Catherine Bement Davis made a study of the intimate sexual life of 1,000 well-educated married women and found that of those who answered the question, 31 per cent of the women stated that the degree of intensity of their sexual impulses was

about equal to that of their husbands, 3.5 per cent gave it as greater, and 62 per cent as less. Popenoe [1] states:

> Any general statements in this field must be qualified by many exceptions. Bearing this in mind, it is probably accurate to say that man's sexual desire is, on the average, more uniform in type than that of woman. He is more "susceptible" to the charms of any woman,—of womankind,—than are his sisters to those of mankind. This susceptibility passes more rapidly and easily into actual desire for coitus, than does the desire of woman. A man can be aroused quickly, at any time; a woman only slowly, by means of courtship or caresses,—even then her desire for actual coitus is linked with her reproductive cycle, being most manifest at or near (oftenest just before) menstruation.
>
> Her requirements in a mate are more particularized and not so easily satisfied. It is notorious that the great majority of female prostitutes are unattractive in appearance,—so much so that when they have been deprived of the help of alcohol to befog the discrimination of their customers, many of them have actually been unable to continue in business, and have had to go to work and earn an honest living. It is scarcely conceivable that a group of women would accept a male prostitute who was as unprepossessing as are many of the female prostitutes accepted by groups of men.
>
> This is not to say that woman's sexual desire, when once aroused, is any less strong than that of man. The reverse may be true. But it is not so easily aroused. . . .
>
> The average man is not easily able to resist the advances of any woman who shows plainly that she desires coitus. The average woman (excluding the feeble-minded and feebly inhibited) finds little difficulty—unless at the menstrual period—in resisting the advances of any man. Similar differences of attitude are found among lower animals.
>
> All this helps to explain why the "double standard of morals" came to be, although of course it does not in the slightest degree justify that standard, which is wholly indefensible from the biological, as from every other point of view.
>
> The differences in sexual excitability go back, in part at least, to the fact that an egg-cell ripens only once a month in woman. So far as reproduction is concerned, then, she requires coitus at a definite time; but man must be ready to have intercourse at all times, if he is to be ready to fertilize the egg-cell when it

[1] Popenoe, Paul: "Problems of Human Reproduction," *The Williams and Wilkins Company*, 1926. p. 13 ff.

leaves the ovary. The position of the male reproductive organs outside the body cavity may be connected with this difference in sexual excitability, since in the more exposed position they are more exposed to changes of stimulation.

These real and important differences between the two sexes inevitably produce many minor emotional differences. Moreover, as sexual excitement, lack of gratification, and the like influence profoundly the moods and emotional responses of the individual, and as many, probably most, women undergo marked emotional changes in connection with the menstrual cycle, it is impossible to deny that the total emotional life of man differs greatly from the total emotional life of woman.[2]

Psychological differences.—Professor Thorndike has made some studies of sex differences and, in general, has found that the most important characteristic of measurable differences is their small amount. The mental differences between the sexes are very small compared with the differences within one sex. Men and women are psychologically very much alike. Women are able to do school work of collegiate grade just as readily as men. At the University of Michigan during the college year 1920-1921, the women students attained higher scholastic grades than the men. The figures[3] are:

Women	*Average*
Professional sororities	81+
General sororities	79+
Other women's clubs	77
Men	
Professional fraternities	76—
All house clubs	75—
Athletes	74+
Other men's clubs	73+
General fraternities	71+

The highest average for the men's groups was lower than that of the lowest average for the women's groups. However, this does not prove that women are mentally superior to men. The women who go to college are a more highly

[2] *Ibid.*

[3] Burton, Marion Le Roy: "Are Men Superior to Women?" *American Magazine*, February, 1922.

selected class than are the men who go. Boys go to college more casually than girls. Girls are also apt to be more conscientious in school work than boys. When women are given equal opportunity with men in professional and business fields, they often compete successfully with them. The general conclusion from investigations indicates that this equality of achievement comes from an equality of natural gifts rather than from an overstraining of the lesser talents of women. Thorndike[4] has reported studies which show the probable per cent of men who reach or excel the median woman in respect to each of the following traits:

TABLE LIX

PER CENT OF MEN WHO EQUAL OR EXCEL THE MEDIAN WOMAN

1. In accurate and orderly retention of what is read	73
2. In love of sedentary games of skill	71
3. In independence	70
4. In zeal for money making	69
5. In quickness of recovery from grief	66
6. In love of sports	62
7. In talkativeness	40
8. In humor	61
9. In gayety	40
10. In vanity of person	40
11. In patience	38
12. In sympathy	38
13. In excitability	37
14. In religiousness	36
15. In dissatisfaction with oneself	36
16. In activity (of the aimless sort)	36
17. In impulsiveness	34
18. In desire for change	32
19. In emotionality	30
20. In temperance in the use of alcoholic drinks	30 or less
21. In adroitness in manual work	28
22. In industry	28
23. Interested in persons rather than in things	15

According to this table, men excel women in the first seven traits and women excel in the remainder. On the basis of past investigations only, we can conclude that the greatest psychological difference between men and women is that women are more interested in persons than in things.

[4] Adapted from Thorndike, Edward L.: "Educational Psychology," p. 201, Vol. III, Teachers College, Columbia University, 1914.

As a group, they are also probably more interested in children than are the men, but it is problematical whether these differences are inherited or acquired. Recent studies indicate that these differences are not innate, but acquired. It is even doubtful whether girls would play with dolls if they were not trained to do so by their mothers. When little girls are persuaded to play with dolls, the doll is more of an opportunity for manipulating it by dressing and undressing it than a "baby" upon which an early maternal instinct can be directed. Sometimes a doll is a companion, but it is seldom a "baby." When boys are trained to play with dolls, they will play with them just as affectionately as girls. The doll is personified as a companion and not as a child. Little evidence has been found which indicates that women, as a group, inherit more of a parental instinct than men do; nor are men more pugnacious by inheritance than women. Such psychological differences are the result of environment rather than inheritance.

Men and women, as members of the two groups, have few differences in character and personality traits, such as truthfulness, tolerance, superficiality, stupidity, ability to draw, mimicry, ear for music, patriotism, straightforwardness, trustfulness, kindness to animals, snobbishness, and pleasure seeking.

The fact that history has given us very few great women in comparison with the number of great men might be attributed to greater variability among men even though the average general intelligence is the same. Studies of variability have not yielded any definite evidence to indicate that men do vary more than women with respect to intellectual traits. It is true, of course, that we have more men than women in institutions for the feeble-minded, but this difference may be the result of economic pressure. Men must be economically self-supporting, or they are confined in an institution, whereas women are more apt to be kept in the home and allowed to perform routine tasks for which a feeble-minded person may be trained.

The psychological problems of married women compared with those of single women.—In Chapter I a report was presented of the psychological problems of 1,000 normal women and men. A tabulation was also made of the problems of married and single persons. The average number of problems reported by each of four groups were:

Groups	*Problems*
Married men	16.1
Single men	17.5
Married women	16.3
Single women	18.0

The data indicated that the four groups were similar in the number of problems reported. The reader can give his own interpretation of the causes of the differences reported and presented in the following table:

TABLE LX

PROBLEMS OF MARRIED WOMEN COMPARED WITH THOSE OF SINGLE WOMEN

	Percentage of married women having the problem	*Percentage of single women having the problem*
Problems which married women have more than single women:		
Tendency to take life too seriously	30	22
Tendency to give up my rights for the sake of others	20	7
Inability to remember important matters	17	9
Fear of serious illness	15	10
Fear of being poverty-stricken	15	9
Fear of being injured in traffic	15	6
Inability to get along with relatives	15	5
Fear of old age	14	9
Lack of opportunity to succeed in life	12	5
Tendency to "fish for compliments"	9	6
Inability to select the right clothes	8	4
Lack of humor	8	3
Problems which single women have more than married women:		
Worrying about what others think of me	25	35
Habit of daydreaming	13	30
Fear of getting fat	20	29
Inability to save money	15	28
Feeling myself inferior to others	13	21

TABLE LX *(Continued)*

PROBLEMS OF MARRIED WOMEN COMPARED WITH THOSE OF SINGLE WOMEN

	Percentage of married women having the problem	*Percentage of single women having the problem*
Being too easily led by others	12	21
Being more interested in pleasure than work	2	17
Inability to find the right life mate	3	16
Lack of faith in others	8	15
Lack of enthusiasm	8	15
Habit of tardiness	9	14
Lack of popularity	5	14
Habit of biting finger nails	4	12
Tendency to be cynical	4	10
Belief that I am very homely	4	10
Tendency to tease others	4	10
Belief that I am below average in ability	3	10
Blushing too much	5	9
Worry about halitosis	4	8
Lack of interest in opposite sex	1	8

Sex differences of interest to the executive.—Significant shifts are taking place in the occupational life of women. The 1910 and 1920 census indicated some of the changes. The number of women in gainful occupations were 8,075,772 and 8,549,511. These were distributed as follows:

	1910	1920
Domestic and personal service	31.3%	25.6%
Manufacturing and mechanical industries	22.5	22.6
Clerical occupations	7.3	16.7
Agriculture	22.4	12.7
Professional	5.8	7.8
Trade	9.1	11.9

Women are anxious to escape domestic and personal service as a means of livelihood. They no longer wish to be servants in the home, laundresses, or boarding-house keepers. On the other hand, there has been a great increase in women barbers, hairdressers, manicurists, restaurant and lunch room keepers, and waitresses. The number of occupations which employed 1,000 women or more increased from 203 in 1910 to 232 in 1920. It is probable that, when the 1930 census figures are published, we shall have another increase in the variety of occupations entered by women. About one-ninth of all women who work away from home are engaged in professional pursuits, such as chemists, clergymen, draftsmen, lawyers, osteopaths, etc.

1. The chief trait of women that interests the business executive is the fact that, as a rule, they take a job temporarily. After all, most women expect to marry and have a home rather than a career. Women do not regard a job as a permanent part of their destiny as men do. Consciously or unconsciously, they hope to escape into matrimony. Industry is merely a casual premarital state, which must be ended as soon as possible. It is for this reason that women will leave their jobs or be absent from work in order to do some Christmas shopping or remain at home to take care of a husband or a sweetheart. Their primary interests in life are the needs of the home and they follow their biological rather than their occupational impulses. Women are willing to do their own work and do it well, but they dislike to take on responsibilities which will lower their chances for matrimonial happiness.

At one time, the writer made a systematic study of the relation between ambitions and the jobs held by 776 men and 769 women of a general office. It was found that the men, as a group, who had a definite vocational ambition and were in the kind of job that was in harmony with the ambition were clearly more efficient than the men, as a group, who had a definite ambition but were in a job not in line with their ambitions. For example: men who wanted to be accountants and were working in the accounting department rated higher in efficiency than men who wanted to be accountants but were in a technical research department. However, no such group differences in efficiency were found among the women. In fact, it was very difficult to locate women in the organization who had a definite

ambition. The women worked without any definite vocational objectives.

Inasmuch as women do not consider their jobs as a permanent part of their lives, it is difficult for labor leaders to organize them. They do not care to join a union, and, once they are members of a labor group, they drop out very quickly. Only a great emotional strain, such as a strike, will stimulate them to join a labor organization.

2. Women measure their like or dislike for a job by the personalities about them in shop or office. Men more often seek a specific job because the job is of intrinsic interest and value to them. Women accept a job in a casual manner and then base their attitude toward the work in accordance with their attitude toward their fellow employees and supervisors. If a woman likes her boss, she tends to like her job. If a man likes his boss, he may or may not like his job. At any rate, he is more apt to consider other factors of equal or greater importance than the supervisor. It is for this reason that some successful executives make special efforts to have their women employees like them. They know the importance of a friendly but not too cordial greeting. Every sensible married man knows that his wife will appreciate some little thoughtfulness toward her more than gifts of gold and frankincense. The husband who says, "I never buy my wife any flowers on our wedding anniversary because she has the money and privilege to buy anything she wants," has not learned the fine art of dealing with women.

Women appreciate admiration of their personal selves, but they greatly admire the man who respects them. It is because of their lack of opportunity for professional and other worthwhile training that they have endeavored to gain attention and admiration through sexual charm. The youth who would win the lady of his heart should show by his conduct not only that he admires her, but, more important still, that he respects her for herself. Similarly, the executive who adopts a condescending manner toward

women will lose influence over them in comparison with the man who shows that he respects them and values their points of view and special abilities. The man who says that "women are dumb" has missed the valuable contributions they can make to the success of a business. An executive policy of condescension and familiarity will result in meager returns from the weak-willed, whereas a respectful and friendly manner will yield a rich reward from the stronger-minded women.

3. Women are not jealous of the success of men who move up the business ladder, and will help them to climb and ask little in return for their assistance; but they are often jealous of the other woman who capitalizes her personal attractiveness for her own benefit. Most women still expect men to hold the responsible positions and are more willing to follow a domineering, fatherly type of executive than a sisterly type of woman.

A normal male protestant republican can work in an office with Jews, Catholics, atheists, and democrats, even though he himself is a member of organizations wholly opposed to the religious, political, and racial views of those about him. Few women find their work congenial when they disagree with the religious, political, and racial affiliations of their associates. Any advancements of such associates are apt to be interpreted as evidence of favoritism; and, if a woman is promoted, the other women tend to find more fault than if a man with the same prejudices is advanced over them. Conversely, man objects to a woman who knows more than he does; only the exceptional man cares to marry a woman who is markedly brighter than he. The intelligent women who have married men less intelligent than themselves have had to do so by hiding their brilliance. The woman who wishes to advance in business should not attempt to "show up" a man, even though she is right and he is an ignoramus.

4. Women are more easily discouraged than men. If they find the new job difficult and slightly unpleasant, they

will fail to appear for work the next day. Men tend to have more "stick-to-it-iveness" in the face of mild difficulties. Even though a new woman employee does well for a beginner, she is apt to think that she has not been satisfactory. The executive who supervises women soon learns that turnover is reduced if he takes pains to praise the efforts of the new workers.

Companies that employ large numbers of women soon learn that, if beginners are introduced to new work, not singly, but in groups, they will be more encouraged and remain long enough to learn the work. If a woman finds that some others learn just as slowly as she does, she is greatly encouraged. As previously stated, women are very sensitive to the personalities and opinions of their associates. They cannot analyze the job and their work objectively, but measure their value to their employer by their estimates of the opinions of associates and supervisors. They are also more keenly affected by the criticisms or opinions of men supervisors than of women supervisors. Hence, new women workers should have supervisors who are women.

5. Women are absent from work more than men. Hence, a larger number of women are required on a pay roll to operate the plant than when men are used. Several years ago, the writer was in charge of personnel research for one of the rubber companies in Akron, Ohio. The company wished to know whether salaried women office employees should have the same salaries as men when men and women were doing the same kind of work. At the time when the question arose the company was troubled by what appeared to be an excessive amount of absenteeism. Deductions for absence were not made from any salaries. This was during the period of high prices and plenty of jobs following the war.

Each office employee, regardless of rank, was required to punch a time clock at the beginning and end of each day's work.

A study of all the time cards, visiting nurses' calls, and dispensary calls for the months of February, March, and April, 1920, resulted in data given in the table following:

TABLE LXI

ABSENCE REPORT FOR FEBRUARY, MARCH, AND APRIL, 1920

Causes	*Male*	*Female*
Average number of employees	776	769
Number of absences	471	1,627
Total available working hours	442,316	442,944
Hours lost, all causes	10,724	26,692
Per cent of available time lost	2.42	6.02
Visiting nurses' calls	263	738
Dispensary calls	981	1,552

As shown in this table, the female employees were absent from work, for all causes, two-and-one-half times as much as male employees. No material differences in working conditions or nature of work could be noted which would cause one to expect more absenteeism of women. All the employees were in the general office building of the company. Light, heat, ventilation, etc., were the same for both sexes. The men, on the whole, had more responsible positions than the women.

In view of the unfavorable figures for the women, Dr. Clyde L. Leeper, the company physician, made a careful study and tabulation of all reasons for absences of the women employees for one month, April 12 to May 11, inclusive, 1920. See Table LXII.

The company employed visiting nurses who called at the home of the absentee on the same day the absence occurred. The visiting nurse ascertained and reported the real cause of the absence, in so far as possible, and the nurse's statement of cause was accepted rather than the statement of the employee.

From these data it is evident that at least 17 per cent of the absenteeism of the women office employees was caused by ailments peculiar to women only—dysmenorrhea and ovarian congestion.

It was noted that absenteeism for both men and women

was less on pay days than on other days. In one case fifty employees were absent the day before pay day and only six were absent on pay day.[5]

Women appear to be absent from work because of sickness more often than men, but infant mortality is higher among boys than among girls. Male natality and male mortality are both greater than female natality and female mortality. In 1913, in England, 104 boys to 100 girls were

TABLE LXII

ABSENTEEISM OF WOMEN OFFICE EMPLOYEES, APRIL 12 TO MAY 11, 1920

Cause of Absence	*Number of Absences**	*Total Hours Lost*
Colds	97	1,238
Dysmenorrhea	80	1,198
Illness in family	60	758
Headache	66	505
Biliousness	46	499
Scarlet fever	3	496
Septic throat	15	297
Laryngitis and tonsillitis	13	287
Injuries	7	284
Fatigue	6	276
La grippe	3	256
Toothache	27	245
Mumps	13	192
Miscellaneous	20	162
Nervousness	5	112
Tonsil operation	1	108
Ovarian congestion	1	80
Rheumatism	4	76
Boils	2	76
Dislocated shoulder	1	72
Sore feet	4	60
Dysentery	5	40
Stiff neck	2	30
Eye trouble	9	24
Overslept	3	16
Pain in ear	1	16
Swollen glands	1	16
Pain in side	1	12
Goiter pressure	1	8

[5] Hepner, Harry Walker: "Absenteeism of Women Office Employees," *Journal of Personnel Research*, April, 1925, pp. 454–456.

* "Number of absences" is not the same as number of employees absent. For example, one employee may have been absent on two occasions in the month for the same or different causes. "Miscellaneous" included absenteeism for business, recreation, and other reasons.

born. But during the first month, 129 boys died to every 100 girls; during the following two months, 132 boys to 100 girls; and at the end of the year, 125 boys to 100 girls had died. In Syracuse, New York, in one year, 139 more boys than girls were born, yet only 82 more boys survived the first year. This preponderance of male births, as well as the greater infant mortality of males, occurs the world over.[6]

6. Women are adapted to routine tasks. They appear to accept monotony with more comfort than men. They probably do this, because of their temporary interest in a job. "A job is a job," as one woman said when the employment manager asked her whether she objected to a monotonous task. Of course, intelligence is one factor to be considered in relation to monotony; but, as women appear to be as intelligent as men, we cannot attribute willingness to perform routine tasks to low intelligence.

They also make fewer suggestions for the improvement of the work than men do. Initiative should not be expected on the part of the rank and file of women. They appear to be caretakers rather than promoters.

One taxicab company tried out women drivers, but found that they lacked initiative and were unsuitable for the work. The vice president and general manager of the company said:

> A close investigation and careful analysis of women drivers disclosed the fact that they are not profitable, and neither is it being fair to them, due to the peculiar type of work.
>
> A taxicab driver requires real sales ability. The driving end of the business is not nearly so important as the salesman's ability and initiative and, I might add, plenty of nerve in pushing through congested areas in trying to get a fare. Women are too timid for this type of work, and also, due to the unpleasant parts of this business with which drivers are confronted, especially during the night shifts, it was impractical to have women drive at night. Our investigation showed that the women drivers took in about $3 per shift less than the men.

[6] Dempsey, Mary V.: "Boys Exceed Girls in City," *Syracuse Post-Standard*, Dec. 31, 1928, p. 8.

7. They expect cleanliness and tidiness in their surroundings. Workrooms should be light and airy. It is the influence of women that has taken the cuspidors out of our hotel lobbies. Men find little difficulty in working in surroundings which are slightly dirty. "Cleanliness is next to godliness" is the motto of more women than men. Lunch rooms and rest rooms where women employees congregate should be kept clean. Clean floors and machinery painted white will attract women to a shop, even though wages are slightly below those of other firms in the community.

8. Women have little mechanical ability. They can operate typewriters successfully but men must repair them. The best book of instructions to the majority of women drivers of automobiles consists of but one sentence: "When something goes wrong with the car, take it to or call a garage man." The General Electric Company found that one of their best sales arguments for their refrigerator was: "You don't have to be an expert mechanic to run it. Just leave it alone and it will take care of itself."

Of course, women can be trained to perform many mechanical operations, but their knowledge and skill is usually limited to the job for which they have been trained.

9. Women need special supervision and rules in an organization. Female rather than male coaches should direct their recreational play. They require rest rooms and rest periods. Of 66 business concerns in one city, 19 allow women employees to leave the factory several minutes before the men quit. Their hours of work are regulated by the state. Situations of possible embarrassment must be avoided, such as the overtime working of one man and one woman in an office or a shop. Welfare workers must be available to them at all times. Constant standing or other straining postures must be minimized. Repeated lifting of weights of 25 pounds or more must be avoided as well as exposure to temperatures over 80 degrees and under 50 degrees.

10. In spite of the extra bother that women in an organization may cause an executive, they do have a definite superiority in certain fields of work and in specific jobs. Woman is apt to be the superior of man in certain departments of life just as often as his inferior. One good woman will have a refining influence in an organization of men. The head of a department that employs 120 men has found that the language of his men, their manners, and general behavior is better when he has even one woman of the right type working in the department.

One of the baffling psychological problems that confront the management of industrial concerns is the large amount of thinking and conversation of a sex nature on the part of employees. Any one who has worked in a factory where men only are employed will be able to recall the fact that many workers seem to concentrate as much as 90 per cent of their thinking on lewd aspects of sex. It is an obsession with many otherwise normal workers. The same situation occurs, in a milder degree, in factories employing only female help. The question naturally arises, "How can these employees ever develop reasonable efficiency or train themselves for promotion when most of their thinking and talking is directed toward sex?" It is true that they cannot do their best work under such conditions, but the management can substitute better working conditions and supply other subjects for thought and conversation.

One of the best remedies is that of mixing the sexes. Teachers who have taught in a one-sex school, such as a girls' or a boys' academy, know that an unnatural situation exists under such conditions. The reason for it lies in the fact that human beings, in their thousands of years of evolution, did not evolve in an environment where the sexes were segregated. The family life is the normal condition for men and women in school and in business. A factory or office which is deeply colored with shady conversation can be greatly improved by mixing the sexes so that they are more or less equal in number. The addition of one high type of woman to a force of one hundred male employees

may improve surprisingly the moral status and conversation of the men.

The contribution of woman to business is more than that of cretonne curtains and flowers; more than an insistence upon cleanliness in surroundings and conversation; and more than a willingness to perform the detailed monotonous tasks of business. She can present to the executives a point of view that will enable the management to design more beautiful products as well as guide executives in making decisions that affect the success of the business in general. It is exceedingly unfortunate that our system of education trains women to occupy pedestals in life rather than prepares them for a life of economic activity. In spite of traditional methods of education, women are learning how to have a career as well as how to manage a home. Too many middle class and educated women find an excessive amount of leisure time on their hands which is dissipated in bridge parties and gossip. The sooner they acquire a vocation, the better for them, for men, and for society.

Projects.

1. What is a hermaphrodite? What is meant by false hermaphroditism? Does true hermaphroditism exist among human beings?

2. The Printz-Biederman Company has classified women buyers into nine basic physical types and eight personality types with regard to the purchase of tailored outfits:

Short-slender	The young unmarried woman.
Medium-slender	The young married woman.
Tall-slender	The middle-aged unmarried woman.
Short-normal	The middle-aged married woman.
Medium-normal	The elderly unmarried woman.
Tall-normal	The elderly married woman.
Short-heavy	The unmarried professional woman.
Medium-heavy	The married professional woman.
Tall-heavy	

What differences in methods of retail salesmanship can you suggest for these types?

3. Why is it permissible for men to exchange personal banter with women such as the waitress or the check girl of the cloakroom, but not for women to do so with men of the lower occupational levels?

4. Does menstruation have any psychological effects on women? What are the effects of the climacteric?

5. Should the manufacturer of products for women advertise that his products are designed and inspected by women?

6. Should the employer attempt to obtain the good will of the wives of employees? How can he do so? What are the dangers of such an attempt?

7. Write a *Help Wanted* advertisement to obtain women factory employees and a similar advertisement for male employees. How do they differ?

8. Suggest methods of overcoming the tendency of the women customers of clothing stores who take home party frocks on approval, or "spec," and then return them after a party.

9. When women employees are required to wear a shop costume, should it be made of heavy khaki-colored material or of light-weight gingham? Who should select the style of the costume?

Part VI

PSYCHOLOGICAL RESEARCH IN BUSINESS

CHAPTER XXIII

Basic Principles of Business Research

Introduction.—The difference between scientific research as "lived" by the pure scientist and as viewed by the layman may be illustrated by an incident in the life of the great scientist, Faraday. He gave a lecture in the Royal Institution in London before a group of celebrities of the day. He brought a magnet close to a coil of wire. An electric current was produced. After the demonstration a lady asked him, "Professor Faraday, even if the effect you explained is obtained, what is the use of it?" Faraday replied, "Madame, will you tell me the use of a newborn child?"

The pure scientist conducts his experiments without regard for their practical or commercial value. Eventually, some of the experiments may have practical value, but the scientist seeks truth only. Louis Agassiz, Lord Kelvin, Oersted, and others made their great discoveries without thought of personal gain. Some of their apparently useless discoveries have led to very valuable results for modern business and civilization of to-day.

The findings of the research scientists have contributed immeasurable wealth to the business men of our times. Their methods are now well established in the fields of medicine and engineering. But it is only in recent years that research studies have been made of commercial problems. Ralph H. Dick [1] clipped from the daily press, during the month of June, 1928, all the recognizable articles dealing with the subject of research. The subjects covered were classified as follows:

[1] Dick, Ralph H.: "Research as the New Business Partner," *Executives' Service Bulletin*, Metropolitan Life Insurance Company, September, 1928.

Medical and miscellaneous	147
Technical	135
Economics and management	54
Marketing	44
	380

The value of research in technical matters is now generally accepted, and it is probable that research in problems of business management will make unusual strides in this and the next generation. As Thomas Edison has said, the keynote of the twentieth century will be human engineering. Of course, the business man finds himself in many situations where it is difficult for him to utilize scientific research. Lack of time frequently compels him to make a decision of some sort. Sometimes, too, business expediency does not permit changes wrought by science. A company may have established a reputation for a certain product or service and it would be difficult to make a change, even though scientific studies indicate that a change to a better product might be made. Moreover, the present "laws" of commerce are not nearly so exact and fixed as the laws of physics and chemistry.

In spite of the many difficulties in the way of predicting and controlling human behavior in business, commercial research has now become a distinct phase of modern business, and, in some business concerns, ranks with the accounting and engineering departments. The fact that business has changed from a seller's market to a buyer's market has given commercial research great impetus. The business man who wishes to market a new product now realizes that he must do more than try it out in his wife's kitchen, ask the opinions of his friends, or consult his salesmen. He finds that his own company's records and past statistics of monthly reports do not enable him to predict the public's reception of a new idea or invention. Snap judgments and empirical rules may lead him astray. The best feasible research study is none too reliable.

Professional business research organizations.—In one

issue of a trade journal, ten professional business research organizations were advertised. Some of them have been in existence for years. Others seem to advertise once or twice and then disappear. The ability and reliability of these research organizations must be rated in the same manner that we rate individuals. A few individuals are competent for a specific task, but there are many who are not. The business executive who hires a professional research worker or research organization should be acquainted with research principles if he wishes to secure competent service. Otherwise, he may be handed a voluminous report that looks impressive but is filled with fallacious conclusions. Statistics are often helpful, but they are also very dangerous. The business man should, at least, know the essential terms and methods which are common to research reports in the field of analyzing and controlling human behavior. Some of the essential facts for the business man to realize when he becomes interested in business research are presented.

When starting important business researches.—When an executive or a group of executives decides that a research shall be made of some problem or problems, certain questions should be asked and answered in advance. These are:

1. *Just what is the problem?*—What is it that is to be learned? How shall the problem be stated, in order that the persons making the research may keep it clearly in mind? Shall the research be limited to a single specific problem or shall the investigation be of a broad and generalized scope?

2. *Who shall perform the research?*—In many cases the executives decide that some accountant or statistician now in the company can do the work. Such an attempt to save money is fraught with danger. The findings of a single research may be used to modify a company's production schedule for a year and may involve thousands of dollars. It does not pay to take chances. Only a few large concerns

have a staff of researchers who are qualified to conduct a biometrical investigation. The fact that an engineer knows calculus and can plot nice curves does not mean that he is qualified to make a market investigation or standardize psychological tests for employment. Trained and experienced workers are just as important in research as in other branches of industry.

3. *What shall be the method of securing the data?*—Shall the company start a research department with laboratories of its own; shall field investigators be used; shall the data be secured by questionnaire; shall a test campaign be conducted; etc.? Can the necessary data be secured? Are the facts now available in the company's records? Is it possible to obtain the facts?

4. *Do the executives have a fair attitude toward the research?*—Are they seeking to obtain data to prove a present theory, or are facts wanted regardless of their pleasantness or unpleasantness? Are the executives future-minded or past-minded? Is the research for the purpose of finding out "why the horse was stolen" or to prevent the stealing of horses in the future?

5. *How much time shall be allowed for the investigation?*—Does the company expect the researchers to achieve functions of the administrative executive, or is the research to present facts for the guidance of the executives? One sales manager hired a research man to make a consumer analysis. He agreed to expect his report at the end of three months. However, at the end of two weeks he began to write letters to the researcher, asking him why the sales had not increased in the territory where the analysis was being made. When a company starts a business research department of its own, definite results of proved commercial value should not be expected for one or two years. Furthermore some of the executives of companies having sales researchers are prone to expect the sales research department to act as a sales promotion department. If research is to fulfill its function of making discoveries of value to the business, it

must be allowed sufficient time and remain advisory and independent of immediate problems of showing a profit on the balance sheet.

Points to look for when analyzing a research report.—When any statistical report is analyzed, it is necessary to look for fallacies regardless of the ability or reputation of the author. Business men must operate on the plan of delegating functions and responsibilities to others. When an executive selects the most competent researcher he can find and gives him a research problem, he tends to assume that whatever the statistician says must be true. However, the reader of the statistics must be alert to detect and question discrepancies. It is impossible for the executive layman to know all or most of the errors in statistics or logic that may occur, but some of the more common ones can be pointed out.

1. *Is the unit of measurement sound?*—In statistics, the units of measurements are the bricks from which the whole statistical structure is built. The units of measurement may be individuals, foot-pounds, wages, accidents, or business men, but the unit must be sound in its entity. One sales manager asked his salesmen to predict the condition of business for the next month. Each salesman was to state whether he expected to have an increase in sales over the preceding month. Approximately 80 per cent of the weekly reports of the sales force were optimistic. They were of the type: "Conditions here look very good for next month. I expect to sell more than I did this month." At the end of the month for which the sales had been predicted, less than 10 per cent of the salesmen had had an increase in sales, and the total volume of business for the sales force was 15 per cent below that of the preceding month. The reason for the unreliability of the investigation was that the salesmen knew that the sales manager usually expected optimistic reports and they sent in the expected viewpoint lest they appear to be alibi-artists and expecters of failure.

The prediction could not be reliable because the unit of measurement, in the first place, was unreliable.

2. *Are the data in the report authentic?*—Occasions have arisen where certain statistics have been quoted by bankers, salesmen, publishers, and others, but it was impossible to find any one to substantiate the figures. A notable example is that of the oft-quoted figures regarding the income of men who begin their vocational life at the age of 20. At the age of 45, 16 per cent are supposed to be dead; 65 per cent self-supporting; 15 per cent, dependent, wholly or in part; and only 4 per cent are supposed to have accumulated anything and kept it. When they are 65 years of age, 85 per cent of the men still living are quoted as dependent on children, relatives, or charity.

An attempt has been made to find the original source of the above figures but has met with no success. The life insurance companies that were consulted stated that they had seen the figures and their salesmen had used them, but the originator was not known. So far as they know, no one really knows what the correct figures are.

Other erroneous published statistics are that 85 per cent of business failures did not advertise and that 95 per cent of the people who go into business ultimately fail. On the other hand, R. G. Dun & Company has published a report which shows that "the ratio of commercial failures to mercantile firms in business in the United States from 1866 to 1920, inclusive, averaged barely 1 per cent per year—that is, for each 100 firms in business only 1 failed." [2]

3. *Are the significant facts properly emphasized?*—When the executive reads statistical reports, it is well to note whether the really significant facts are given the proper emphasis. An outstanding example of this is the statement that each year 40 per cent of our corporations have a deficit. This conclusion is drawn from a table issued by the Treasury Department and given below:

[2] "Untrue that 'Eighty-four Per Cent of Business Failures in 1920 Did Not Advertise,'" *Printers' Ink Weekly*, July 7, 1921, p. 87.

TABLE LXIII

STATISTICS OF NET INCOME FROM RETURNS OF NET INCOME

	BLACK INK		RED INK	
	Number Reporting	*Amount of Net Income*	*Number Reporting*	*Amount of Net Income*
1916	206,984	$ 8,765,909,000	134,269	$ 656,904,000
1917	232,079	10,730,360,000	119,347	629,608,000
1918	202,061	8,361,511,000	115,518	689,772,000
1919	209,634	9,411,418,000	110,564	995,546,000
1920	203,233	7,902,655,000	142,362	2,029,424,000
1921	171,239	4,336,048,000	185,158	3,878,219,000
1922	212,535	6,963,811,000	170,348	2,193,776,000
1923	233,339	8,321,529,000	165,594	2,013,555,000
1924	236,389	7,586,652,000	181,032	2,223,926,000
1925	252,334	9,583,684,000	177,738	1,962,628,000

At the same time that the *Advertisers' Weekly* published the above figures, the editors also published the following Treasury Department Explanation:

TREASURY DEPARTMENT EXPLANATION

Treasury Department, Washington, Nov. 5, 1927.
Office of Commissioner of Internal Revenue.

Mr. J. J. Wilber,
National City Company,

Sir: In accordance with your request for a statement concerning the question contained in a letter to you from Mr. George E. Roberts, Vice President, National City Bank, New York, dated November 4, 1927, relative to cash dividends and stock dividends shown in "Statistics of Income for 1925" as having been distributed by concerns which report no net income, you are advised that the term "no net income" as used in connection with returns of net income means no statutory net income.

By referring to the table on page 111 of Statistics of Income for 1925, in which are tabulated the returns reporting deficit, it is shown that they received in tax exempt interest and dividends on capital stock of domestic corporations the sum of $316,174,723. Had the return been made on the basis of net profit from all sources, many of the returns showing no statutory net income would be classed as actually having net profit. There are, moreover, many items of nontaxable income set up on the corporate books which are not shown in the statistics. There are also many cases in which corporations actually do have a deficit for a given year and continue to disburse dividends notwithstanding.

Respectfully,
C. B. ALLEN,
Deputy Commissioner.

This article also points out that many small corporations disburse as compensation almost all their net income to stockholding officers. Also, that financial institutions comprise 26 per cent of the corporations reporting a deficit, and yet a substantial part of their income consists of nontaxable income.[3] Had emphasis been given to the fact that these figures dealt with statistics of taxation rather than of business, much misunderstanding could have been avoided. Beginning with the 1929 publication of "Statistics of Income," the Treasury Department adopted the phrase, "statutory deficits," for balances below the tax line.

Some research reports have a summary of the significant points. These summaries should give special emphasis to the key ideas or words in the findings and conclusions.

4. *Are single causes interpreted to give rise to single effects or events?*—In human relationships, effects are seldom brought about by single events or causes. The "new American tempo" is not the effect of one cause, such as the World War. Increases in crime cannot be attributed solely to a change in religious devotion or divorce. Labor unrest is not caused alone by universal education. Psychological abnormalities cannot be attributed solely to a thwarting of the sex instinct or to heredity. Increases and decreases in sales cannot be attributed to the lone influence of the new sales manager. Decreased labor turnover cannot be interpreted as wholly the result of a newly organized personnel department or of profit-sharing.

The veteran advertising manager of an ice-cream company "showed" how his advertising efforts had increased the per capita consumption of ice-cream in his territory. He should also have mentioned as factors of influence: improved quality of the product, pure food laws, prohibition, greater number of retail outlets, lower cost of production, and greater competence of company management.

5. *Are graphic curves of increase and decrease compared with basic curves of increase and decrease?*—This kind of error is common in reports of individual executives to the management. The sales manager may show that sales have increased 20 per cent each year over the preceding year for the past five years. He should also show how much the industry, as a whole, has increased during that period. The employment manager may show that labor turnover has decreased each year for the past three years. He should also compare his curve of decrease with the employment situation of the community.

[3] "Knocking the 40% Red Ink Bugaboo into a Cocked Hat," *The Advertisers' Weekly*, Dec. 3, 1927, p. 3.

6. *Are the graphs in the report properly constructed?*—The modern business man who wishes to understand statistical reports needs an understanding of some of the more common principles of graphic charting.

If the statistician wishes to construct a simple line curve to show the amount of building construction in a certain city over a given period of years, it is possible to construct the graph so that a small or a great increase or decrease may appear to have taken place. This may be done regardless of the actual facts in the situation. The fluctuations may be shown so that they appear to have been violent and unstable or of little fluctuation and great stability. The construction and type of graph is often determined by the impression that the statistician wishes to make on his readers. One of the best statistical devices for comparative data is the index number.

TABLE LXIV

SHOWING ACTUAL SALES BY YEARS AND INDEX NUMBERS THEREOF

Year	*Actual sales (thousands of tons)*		INDEX NUMBERS *On* 1913 *base as* 100		*On* 1927 *base as* 100		*On* 1922-1926 *base as* 100	
	XYZ Co.	Entire Industry	XYZ Co.	Entire Industry	XYZ Co.	Entire Industry	XYZ Co.	Entire Industry
1913	5.2	31,300	100.0	100.0	36.4	70.8	50.3	73.8
1914	4.0	23,513	76.9	75.1	28.0	53.2	38.7	55.4
1915	6.3	32,151	120.2	102.7	43.7	72.7	44.4	75.8
1916	7.9	42,773	151.9	136.7	55.2	96.8	76.4	100.8
1917	8.5	45,060	163.5	144.0	59.4	101.9	82.2	106.2
1918	8.0	44,462	153.8	142.1	55.9	100.6	77.4	104.8
1919	7.0	34,671	134.6	110.8	49.0	78.4	67.7	81.7

TABLE LXIV *(Continued)*

SHOWING ACTUAL SALES BY YEARS AND INDEX NUMBERS THEREOF

Year	*Actual sales (thousands of tons)*		INDEX NUMBERS					
			On 1913 *base as* 100		*On* 1927 *base as* 100		*On* 1922-1926 *base as* 100	
	XYZ Co.	Entire Industry	XYZ Co.	Entire Industry	XYZ Co.	Entire Industry	XYZ Co.	Entire Industry
1920	8.4	42,132	161.5	134.6	58.7	95.3	81.2	99.3
1921	3.6	19,783	69.2	63.2	25.2	44.7	34.8	46.6
1923	9.0	44,943	173.1	143.6	62.9	101.7	87.0	105.9
1924	7.3	37,932	140.4	121.2	51.0	85.8	70.6	89.4
1925	11.5	45,394	221.2	145.0	80.4	102.7	111.7	107.0
1926	15.8	48,294	303.8	154.3	110.5	109.2	152.8	113.8
1927	14.3	44,214	275.0	141.3	100.0	100.0	138.3	104.2
1928 ..... (Est.)	16.5		317.3		115.4		159.6	

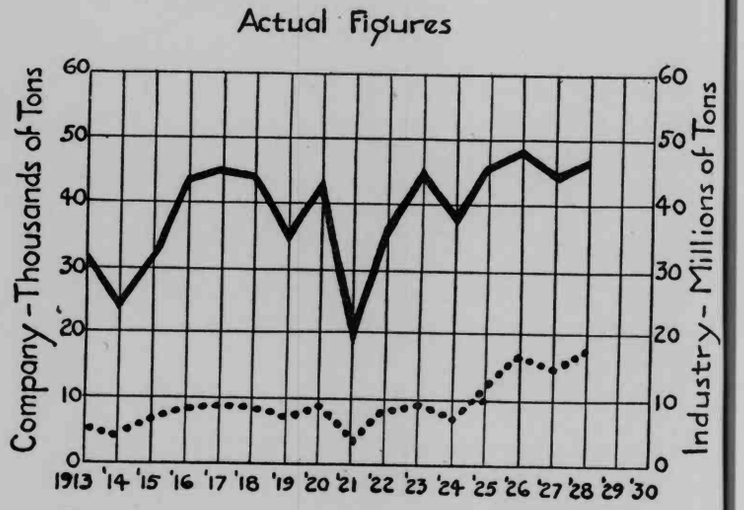


Fig. 55—Graphic Representation of Actual Figures, Table LXIV.*

The above table illustrates three possible index numbers, or series of simple relatives, which might be constructed from the *actual* sales data in the first column.

* Table and charts adapted from *The Executives' Service Bulletin*, Metropolitan Life Insurance Co., December, 1928.

The method is simply to divide each year's sales by the sales in the base period which you may think best. The base periods here used are (1) the year 1913, (2) the year 1927, and (3) the yearly average for the five years 1922-1926 inclusive.

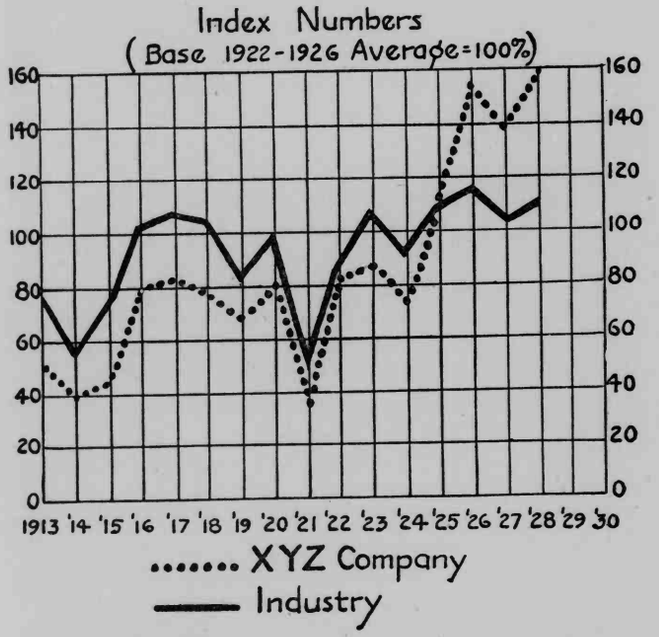


Fig. 56—Graphic Representation of Index Numbers, Table LXIV. The curves of Fig. 56 can be compared more easily than those of Fig. 55.

What practical purpose is accomplished by the use of these index numbers? Examination of the corresponding graphic charts of Table LXIV will disclose some of the advantages. The charts show the *actual* course of sales in both the XYZ Company (dotted line) and the industry as a whole (full line). Even when two different scales have been used as here, it is often difficult to adapt the scales in

such a way as to throw the two curves near enough together for an effective comparative study. Frequently the company curve may turn out to be a considerable distance above or below the other—a result which introduces certain difficulties for the eye and involves also certain technical difficulties.

Having chosen a base period suitable to whatever purpose the executive may have in mind, the curves are readily brought into each other's neighborhood by the index-number method. Then it is easy to answer such questions as the following: How does the long-time growth of our company show up in comparison with our industry as a whole? How much more, or less, did any given boom or depression affect us than it did the industry generally? How does our recent position compare with that of the industry? [4]

Of course, the index number is not the only method of analysis which can be used on occasions to answer such questions as these; but it is one of the most effective, and, when properly understood and applied, one of the easiest as well. Some statisticians prefer to use the semilogarithmic charts.

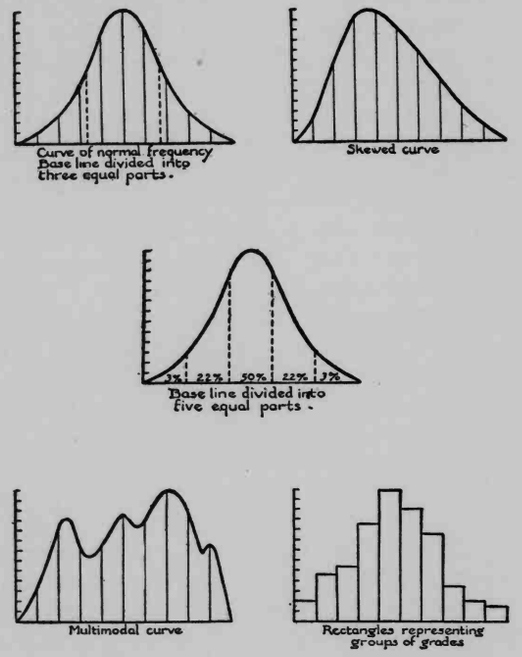
Graphs are the quickest, clearest, and most condensed method of conveying valuable information to the executive, but he should realize their potency for misinformation as well as for administrative guidance.

7. *Is the number of units studied sufficiently large to represent the group fairly?*—It is obvious that, if we wish to study any single human trait, such as the general intelligence of salesmen, it is necessary to test the intelligence of a large typical group of salesmen. If we were to draw conclusions from the measurements of only ten salesmen, we would be very liable to fall into error. Psychometrists have developed several formulas which show the required size of the group, or, in some cases, the unreliability of the conclusions drawn from a group of a given size. We shall leave

[4] *Executives' Service Bulletin*, Metropolitan Life Insurance Company, December, 1928. Table LXIV and charts are adapted from this article.

these more complicated formulas to the statisticians, but the business man can approximate a decision from two simple questions:

Do the measures extend over the entire *range* for the group in question? An example is that of the study of intelligence of college students. If we were to measure the



intelligence of only those students who fail in college or those who graduate with honors, we would not be testing a representative sampling of the factor under study. Tests would have to be made of those who fail, those who do passing work, those who do average work, those who are slightly above the average, and those who are the best.

The next question is: How *many* students must we have

on each part of the entire scale? We can answer this by noting whether the number of cases measured distribute themselves according to the normal frequency (normal probability) curve. When the base line of the theoretical probability curve has been divided into five equal parts and vertical lines have been erected at the dividing points, five areas result, which include the following percentages, reading from left to right: 3, 22, 50, 22, 3. This bell-shaped curve seems to apply to all living characteristics. It has even been found that, when the number of hairs on the left hind legs of a large number of bees are counted, the frequency curve has this bell-shape. Because of this universality of distribution of human traits, many schools and colleges grade their students in conformity with this curve.

When an insufficient number of cases have been studied, the frequency curve may be skewed or multi-modal in form. This discussion applies only to those human traits where it is desired to measure a representative number of nonselected persons or reactions. That is, if we wish to test the intelligence of only the best 10 per cent of salesmen in one company, the normal frequency curve would not result. But if we were to test the best 10 per cent of all salesmen in a thousand companies, the plotted results would probably follow the normal curve.

8. *Should the data for a group be checked by control groups?*—When a group of persons are experimented upon in the laboratory to determine the effects of smoking, caffeine, scolding, praise, music, lighting, or a system of wage payment, it is also necessary to measure the same or similar reactions of another group of persons who are not affected by the same stimuli. One investigator experimented upon the effects of periodicity of women in the performing of certain mental functions. A control group of men was used because, obviously, they could not be affected by the same organic condition. It was found that the men had more fluctuations which could be looked upon as cyclical for twenty-eight-day periods than the women! If the control

group of men had not been used, it is probable that the data of the women only would have given an impression of a different nature than when comparisons were made with an unaffected group.

Sometimes experimenters try a new method of sales management, or lighting, or wage payment, and find that the production figures go up the next month. These stimuli do cause changes in production, but it is well to check the new plan by allowing certain groups to work under the old system, in order that the one factor which is blamed or praised for the change may really be known beyond any chance factors that may be bringing about the change. In the experiments on the effects of drugs, it is absolutely essential to have control groups because of the effect of suggestion. It is also essential in proving the effects of new methods of motivating or training employees.

9. *Do the conclusions and suggestions harmonize with general reason and business judgment?*—Because of the opportunities for misinterpretation of statistics, it is well to compare the findings with empirical conclusions. As General Samuel McRoberts, Chairman of the Board of Directors, Chatham Phœnix National Bank and Trust Company, once said: "Beware of the man who is directing the course of his business by a chart. He is in the hazardous position of the man who bets on a sure thing. It is well to approach the study of business conditions with the same sort of modesty which you secretly possess regarding your game of golf." [5]

It should be kept in mind at all times that laboratory experiments in human reactions usually deal with one factor or one set of factors only. The experiment may be sound so far as it goes, but *psychological laboratory conditions seldom approximate actual conditions.* Some important human reactions cannot be subjected to experiment. Several psychologists have attempted to measure the re-

[5] "Common Sense about Charts," *Printers' Ink Weekly*, Nov. 13, 1924.

actions of persons when in love, angry, fearful, or sexually excited; but it has been very difficult to achieve genuine mental states in the laboratory.

All psychological laboratory experiments should be looked upon as laboratory experiments which may or may not carry over into actual life and business. One business man read the following table of color preferences of men and women and then told his advertising manager to discontinue the use of orange as the dominant color in the company's display cards for dealers' windows: [6]

TABLE LXV

COLOR PREFERENCES OF MEN AND WOMEN

Color	*Percentage Who Like It*		*Percentage Who Dislike It*	
	Men	Women	Men	Women
Red	22	42	7	8
Orange	5	8	25	31
Yellow	2	5	32	8
Green	7	9	15	21
Blue	42	9	12	23
Violet	19	19	8	9
White	3	8	1	0

This experiment in color preferences did not justify the use or disuse of any particular color, where the colors were used in relation to many other factors, such as surrounding colors, lighting, area to be colored, attention-getting, etc.

If the investigation does not agree with the past experience of the best executives who are conversant with the empirical facts, then it may be necessary to repeat parts of the research. On the other hand, if the study does indicate that it would be advisable, all things considered, to make certain changes, the research will have been a waste of time and money unless the changes are made. Far too many executives become enthusiastic about an investigation, beg for reports, and for the final report, and then, when they do receive the final report, they read it and do nothing. It may even be read only casually.

[6] Wissler, C.: *Psychological Monographs*, 1901, III.

The writer happened to be employed by a large industrial concern, before the depression of 1920. His work required contacts with the executives. Inasmuch as the company subscribed for several business forecasting services, the executives, at times, had copies of these forecasts on their desks. When they were asked about their opinions of the forecasts, they made remarks such as: "Oh, well, these statisticians must be pessimistic occasionally. Our prospects are rosy." And yet many of those executives continued to expand their own departments and spend money without any thought of the future reckoning which put most of them out of their jobs.

Researches should, above all, be sound in their conclusions; but they should also be used when they are accepted as sound.

Methods of Obtaining Research Data

Several methods of securing business research data are in common use. The method varies with the need. A problem may demand a special type of laboratory, test campaign, questionnaire, analysis of company records, or a field survey. The business psychologist is interested particularly in the questionnaire and field survey. We shall discuss briefly the mailed questionnaire and the method of securing data through field investigators or interviewers.

The mailed questionnaire.—The most common device in business research which involves psychological factors is the questionnaire. It has been used to the extent that many business men are annoyed as soon as they receive a letter with a questionnaire attached. The reason for this attitude may be attributed to the fact that all business men like to answer their mail promptly and completely. Questionnaires in the past have been phrased in such general and vague terms that the person answering them may, while he is answering the questions, feel that his answers are going to be useless, because he is not sure that he under-

stands the questions in the same way that others understand them. Frequently, too, the answering of a questionnaire has involved a great deal of time and expense. In spite of the fact that many business men and others dislike the questionnaire, it is still widely used and will continue to be used. Fortunately, the phrasers of questionnaires are learning how to make them attractive, inviting, and reliable. The chief psychological factors in securing a high percentage of replies to mailed questionnaires are:

1. Have an attractive physical appearance of the questionnaire.
2. The recipient should be made to feel that the questionnaire is worth while.
3. Compensate the answerer for his trouble.
4. For some studies the real sender should be of hidden identity.
5. The questionnaire should be given a preliminary test on a small group before it is tried on the larger group.
6. Make the questions easy, and, if possible, interesting, to answer.

1. *The physical appearance of the questionnaire.*—A concern which sells by direct mail would not think of sending out a letter set in solid monotonous type. The direct mail expert will make careful tests of returns relative to copy, color of paper, quality of paper, postage, day of week mailed, and other pertinent factors. It is necessary, therefore, to prepare the physical appearance of the questionnaire with consideration of the same factors used in direct mail. The questionnaire can be illustrated with human interest pictures that explain the purpose of the questionnaire and enable the answerer to state his experience or wants with pleasure as well as ease. Pictures on mailed questionnaires increase the returns greatly. Color illustrations and attractive appearance are essential to large returns in direct mail. They are just as essential to returns in questionnaires.

2. *The person addressed should be made to feel that the questionnaire is worth while.*—The person who is asked to answer a questionnaire usually feels that he would be doing the sender a great favor by taking the time to answer the questions. In order to obtain answers, therefore, it is well to make the answerer feel that he is doing himself a favor. Most questionnaires introduce the request for answering as this one did: "We are compiling some data giving us statistics on our business and we would like you to fill in the inclosed questionnaire and return it to us in the inclosed stamped envelope."

Contrast that with this concern, which was trying to get the attitude of their 3000 dealers toward them as jobbers: "Did you ever get mad at us?!! Perhaps we were at fault in some of your dealings with us. We are doing some housecleaning of our own minds and methods of doing business. Our friends and our enemies can help us improve our service to them by being frank with us. Please check over the following list and make any comments that you wish. We'll appreciate it and thank you in advance." One jobber received 500 replies from 3,000 dealers by use of a similar request. The replies were followed up by the management through the salesmen.

The appeals which succeed in direct mail advertising often succeed in questionnaires. One concern phrased its questionnaire to give the impression that a very charming woman was asking a very small favor. The letter gave the reader the impression that her employer had made a wager that the readers would not answer her questionnaire and she was trying to convince him that the recipients were really interested in helping those who wish to improve business methods.

When the questionnaire is sent to some one specific group, such as kindergarten teachers, accountants, or shoe merchants, it is often possible to appeal to them by offering them a copy of the data when it has been compiled. In that case, it is well to specify the date when the report will be completed and available. A request card for the report

should be attached to the questionnaire to enable the person who answers the questionnaire to realize that he may have a free copy of the report.

Where the copy of the report has no appeal, it is possible to increase the answers by offering a small gift for answering the questionnaire and returning it by a definite date.

3. *Better results may be obtained if the true identity of the sender is hidden.*—Magazine publishers occasionally wish to make an impartial investigation of their readers' preferences. In some cases, the candid answers of the person who fills in the questionnaire may reflect against the publisher who send the questionnaire. In cases where honest answers might offend the sender, it is well to give the recipient the impression that the investigation is being made by an accounting or a statistical concern.

Much depends upon the purpose of the questionnaire. If it is desired to learn about the complaints of the customers, the true identity must, of course, be stated.

4. *Decide upon the type or class of people that you wish to reach.*—In certain situations in business it is easy to limit the sending of the questionnaire to the desired group. When a company wishes to get customers' reactions and the company has a complete list of customers, this problem of finding the right group is answered. When the reactions of the general public are desired, it is well to find out which segment of the public is to be reached. Several studies have been made of the relative values of newspaper features. Each study showed some differences that might be traced to the type of persons reached by the questionnaire. Walter Dill Scott sent a questionnaire to Chicago business and professional men; Hotchkiss and Franken sent a similar questionnaire to business men of New York City; and the writer sent his to members of luncheon clubs and had college students give them to their business friends. A morning newspaper in a city of 200,000 conducted a contest in which it asked its readers to send in their preferences for features of

the paper. It also offered a prize of $25 for the best answer. The following table [7] shows the rank or order of preferences expressed in the four surveys:

TABLE LXVI

ORDER OF PREFERENCE FOR FEATURES OF A DAILY NEWSPAPER

	2,000 *prominent business men (Scott)*	410 *business men (Hotchkiss & Franken)*	693 *members of the general public (Hepner)*	331 *readers who took part in a contest*
Local news	1	8	1	4
General news	6	2	2	8
Editorials	5	5	3	1
Sporting news	8	6	4	9
Cartoons	9	10	5	17
Political news	2	3.5	6	..
Weather	19	..	7	..
Pictures	..	..	8	..
Display ads	17	12	9	..
Foreign news	4	3.5	10	..
Jokes	20	..	11	..
Financial news	3	1	12	20
Society news	14	18	13	..
Classified ads	17	..	14	..
Signed, syndicated articles	10	9	15	9
Arrangement of copy	13	..	16	..
Short stroies	18	22.5	17	22
Music	11	17	18	..
Drama	15	15.5	19	..
Book reviews	12	13	20	21
Ethical tone	7	14	21	..
Art	16	22.5	22	..

The pronounced differences in rank, such as the rankings for "Financial news," 1, 3, 4, 20; for "Local news," 1, 1, 4, 8; and "Book reviews," 12, 13, 20, 21, may be accounted for partly on the basis of the particular classes of persons who answered the questionnaire. The newspaper referred to above made a somewhat similar study of the same problem, but employed college students to call on people at their homes in the afternoon and interview them. In this survey, they found that "How to Keep Well" ranked among the

[7] Hepner, Harry Walker: "70% Read Newspaper Ads, Survey Shows," *Editor and Publisher*, Nov. 27, 1926.

uppermost five features. This was explained by the fact that a disproportionately high percentage of sickly people remain home in the afternoons and answer questions of strangers who call at the door.

When it is important to know what types of people answer the questionnaire, it is well to insert questions that will enable the investigators to tabulate the answers according to groups, such as occupation, education, sex, age, etc.

5. *Give the proposed questionnaire a preliminary trial on a test group.*—Again, the principles of direct mail should be used with the questionnaire. The direct mail specialist will not use a letter on a large group of prospects until he tests it on a small group. He finds that he must do this, even though he is absolutely certain that he has a good letter. Experience has taught him that it is dangerous to spend large sums of money until he has determined the percentage and quality of returns.

Questions which are quite clear to the researcher may be ambiguous, vague, impertinent, or unnecessary to a large number of strangers. Only a trial survey can determine the probable value of the mailing. In making the trial survey, it is well to have interviewers present the questionnaire to individuals in person and then note their remarks and questions as a guide to revision.

6. *Make the questions easy to answer.*—No one enjoys attempting to answer a question that he does not understand. The more certain the reader is that he understands the question, the more willingly he will answer it. For this reason, questions of opinion rather than concrete facts are inhibiting to the answerer of a questionnaire. Questions such as, "Why did you buy a Blank auto?" "What is your opinion regarding our powdered milk?" or "How would you advise us to change our displays?" are not clear and definite to the consumer, and he cannot answer them correctly. This type of question, however, will give a copy

writer a great many suggestions for new copy in advertisements.

To achieve certainty of understanding, it is well to have the questions relate to matters of fact rather than opinion and then give all the possible types of answers after each question. Checking the correct answer will then be easy and will clear up any vagueness in the phrasing.

Questions should be stated positively rather than negatively. For example, it is better to say "Have you bought any Blank soap this week? Yes ——, No——," than to say "Have you not bought any Blank soap this week? Yes——, No ——."

Questions which involve the prestige or personal integrity of the person answering them, such as, "How much did you pay for your last hat?" "Do you do your own washing?" "Why do you not pay your bills promptly?" "How often do you take a bath?" do not elicit accurate results. When it is necessary to ask questions which involve the personal intimacies of the individual, the questionnaire must come from a third disinterested party or from someone who is able to assure the person that the answers will be kept confidential and used in a legitimate manner.

One concern made their mailed questionnaire attractive to housewives by writing an interesting short story, in pamphlet form, where they described the problems of a housewife. The story also set forth the methods of work of the housewife. The reader was asked to check the method that she herself used under those conditions and in this way the manufacturer learned the conditions and methods under which housewives used his product.

The questionnaire should be brief, but it can also be made so interesting to the persons who are inconvenienced that they will answer a long list of questions. Marshall Olds [8] wanted to make a study of retailers' reactions, but he wanted to ask 127 questions. By offering the persons

[8] Olds, Marshall: "Getting Results from a Questionnaire," *Printers' Ink Weekly*, April 28, 1921.

who answered a copy of the complete tabulation, he was surprised to receive 1,600 complete replies by mail from 3,000 retailers. By a skillful questionnaire it is possible to obtain a high percentage of answers.

The personal interview as a source of research data.—Sometimes the questionnaire will not elicit the desired data when mailed. It may then be necessary to obtain the information by means of interviewers. If a study were to be made of the reactions of vegetable hucksters, factory workers, or shoe shiners, the results of a mailed questionnaire would be inadequate. When necessary to secure answers to a large number of questions, the interview may be the best method of getting representative answers. Sometimes the same people who will not answer a list of questions by mail will do so when called upon personally.

For research problems, where the study cannot be made through mailed questionnaires, personal interviews must be obtained. An example of this is the advertiser who wishes to find out which of three proposed headlines, illustrations, or layouts is the best. If the researcher were to hand copies of the three advertisements, identical in every respect except the factor under investigation, to fifty buyers, and ask each buyer of the commodity to state which of the three advertisements was the best, many of the fifty persons would cease to be consumers of the product advertised and become advertising critics. Their reactions would be artificial. By means of interviews, it is possible to plan a technique which will lessen the artificiality of the judgments.

If a study is to be made of three different kinds of copy, three advertisements can be prepared which are identical in all respects except that of copy. Ten other advertisements of different products can be mounted on cardboard. When the investigator is calling on typical buyers of the product to obtain their reactions, he may fumble in his brief case for the ten advertisements and "accidentally" pull out the three advertisements and hand them to the prospect with a passing remark, such as "Do you care to look at these

while I prepare my ten advertisements for your opinion?" In a few seconds he arranges the ten advertisements and the prospect lays aside the three important advertisements. After a five-minute discussion of the ten advertisements, the interviewer replaces in his brief case the ten advertisements, and then, *incidentally*, asks the prospect about the copy of the three layouts he saw in the early part of the interview. The reactions of the prospect will then approximate those which he would have if he saw the advertisements in a periodical where they would have to compete with many other interests.[9]

If the interview is used, it is essential to choose and standardize the questions just as carefully as for a mailed form. The interviewers must also be instructed as to how they are to present the questions. They must be trained so that they do not put the answers into the mouths of the informants. When persons are interviewed who are not accustomed to supplying information to oral questions, the interviewer should be trained not to write the answers in the presence of the informants. They may dislike the idea of having someone write their statements as they make them. In some cases the investigator can be taught to memorize the questions and then informally write the answers on the margin of a newspaper and copy them later.

The research interviewer should have some qualities of salesmanship. However, salesmen are not, as a rule, competent to do field work of a research nature. Salesmen are trained to influence the answers of the person interviewed. They are apt to see only those factors of the situation that agree with their own prejudices. They are promoters rather than analysts.

Experienced researchers find that a major problem in dealing with responsible directing executives is the lack of calm analysis of situations and reports by the examining executives. A manager who initiates and authorizes a

[9] Robinson, D. E.: "How to Use the Laboratory Method of Testing Advertisements," *Printers' Ink Weekly*, Nov. 29, 1928.

costly research may be influenced more greatly by one or two dramatic personal experiences than by the reported reactions of a thousand strangers who use his product. His emotions blind his intellect. Many of the basic principles of valid research are common knowledge, but this list of rules has been submitted in the nature of a check list for the guidance of the executive.

Projects.

1. Suggest titles and headings for advertising a booklet on child training which is to be sent to young mothers. Assume that the headings are to set forth the main appeal in a direct mail booklet. As a suggestion, consider the results of a questionnaire answered by mothers who gave their votes for first choice of these six terms as follows:

	Votes
Scientific child training	3
Psychological study of the child	3
Happy childhood	39
Better parenthood	17
Character education	30
Preparing the child for life	40

2. A doctor made the following statement: "I had all the nicotine removed from a cigarette, making a solution out of it. I injected half the quantity into a frog with the effect that the frog died almost instantly. The rest was administered to another frog with like effect. Both frogs were grown and of average size. The conclusion is evident that a single cigarette contains enough poison to kill two frogs."

Is this a valid argument to prove the harmfulness of cigarette smoking? What would be the effect of taking the white of an egg and injecting a part of it into the human bloodstream? (For guidance in obtaining the answer, look up the chemical nature of rattlesnake venom.)

3. A popular cigarette has been advertising the results of "blindfold tests" where the person blindfolded preferred the brand advertised.

Specify the conditions under which such a test would have to be conducted in order to prove the superiority of the advertised brand. Include factors, such as inflection of the voice in giving the directions, use of celebrities for making the test, etc. In what order should the various brands tested be rotated so that the right brand would not always be in the popular third or fifth position?

4. In reading a research report, how can one detect whether the writer tried to prove a point or merely to present the facts that he happened to find? What are the distinguishing characteristics of reports that *defend a position* compared with those that *try to promote an idea?*

5. In a discussion group of thirty industrial executives, the leader of the group was opposed to a bonus for the foreman of a gang of seven workers. Three of the members of the group had had experience with bonuses for the foreman of small units of production. These three men were heartily in favor of a bonus for the foreman as well as the workers. The leader of the discussion group then asked the members of the group to vote for or against a foreman's bonus. The three who had had experience with such a situation voted in favor of the bonus; the remaining members of the group who had had no such experience opposed it.

How can the voting of these executives be explained?

6. In the middle of the college year, a questionnaire survey was made of the value of advertising in the college daily newspaper. This paper is read by nearly all the students. The students were given a printed questionnaire with a list of 15 local business concerns. They were asked (1) to check those firms who advertised in the college daily, and (2) to state the kind of business of each firm.

Of the 450 students who answered the questionnaire, 85 per cent were freshmen and 15 per cent were seniors. They were evenly divided as to sex.

The amount of advertising for the year by each firm on the list was computed. Eight firms on the list had had no advertising in the college paper that year, and some of the eight did no daily paper advertising whatsoever.

The tabulation shown on page 672 resulted.

(a) Assume that you are the manager of one of the firms that have been advertising in this college daily. How would the following data influence you in your advertising in the college paper? (b) What does this report indicate regarding the value of advertising in college newspapers?

TABLE LXVII

Name of firm	*Per cent of students who said firm advertised in college paper*	*Per cent of students who knew the kind of business of the firm*	*Index numbers of the amount of advertising done by each firm. (The heaviest advertiser was taken as 100%)*
1. Varsity Sport Shop	72	85	100.0
2. Full Dress Parlors	57	79	66.6
3. Bee-Neet Co.	53	68	6.6
4. Andrews	40	56	3.3
5. Chappels	37	53	66.6
6. Clarks	38	54	6.6
7. Walk-over Boot Shop	31	53	none
8. Besse Sprague	38	53	6.6
9. Edwards	33	50	13.3
10. Yates	30	50	none
11. N. M. Peters	29	46	3.0
12. Phoenix Kline	28	44	none
13. G. F. Lindemer	38	37	33.3
14. Footes	23	36	3.3
15. Goodlows	26	38	6.6

CHAPTER XXIV

Psychological Research "Tools"

When the findings of business research have been collected by means of the mailed questionnaire, personal interview, laboratory experiments, or other means, the data must then be treated statistically. Some of the psychologist's more common methods of securing and treating research data will be discussed briefly, with the emphasis upon the measurement and analysis of human reactions.

The order-of-merit method.—The order-of-merit method is one of psychology's oldest and most used devices for measurement. The physicist and others who use apparatus for the measurement of their phenomena are measuring tangible things. They have devised methods of measuring certain natural phenomena in terms of feet and pounds. Psychologists have used similar methods in dealing with human reactions and have found that many psychological measurements in the form of order-of-merit rankings agree with the physically measured differences. Examples are reported in the studies of Weber and Fechner, who found that it was possible to measure the effects of sounds, light, pressure, and weights by varying the intensity of the stimuli and then noting the subjects' reactions to them. Franken also discovered that it was possible to vary slightly the shape and cubical contents of cans and have the subjects arrange them in order of merit. The rankings of the estimators or subjects agreed with the cubic capacity of the cans. According to Poffenberger,[1] the group estimates of 25 judges of irregular geometrical figures or black areas agreed with the actual order of merit of the figures when measured objectively. And yet the differences between the

[1] Poffenberger, A. T.: "Psychology in Advertising," Chapter V, A. W. Shaw Co., 1925.

areas of the various figures were only 5 per cent over that of the figures next in order.

The order-of-merit method is illustrated in the ranking of the test scores of employees in Table LXIX. It is especially useful in problems of human measurements, such as rating the ability of the employees of a given department. The name of the person who is the best, the strongest, or the highest in a trait can be put at the top of the list. The poorest can be placed at the bottom. The others can be placed in what is believed to be their rank between the two extremes. In similar manner, all forms of behavior which cannot be measured objectively can be ranked according to estimated differences between members of the series or class. However, certain precautions should be followed in using the order-of-merit methods of measuring reactions.

1. *The rankings of any one rater are not reliable.*—At least three persons should rank employees for efficiency ratings. In the case of advertising, it is well to have two groups of 50 persons each rank the advertisements and then compare the rankings.

2. *Competent individuals should do the ranking.*—In rating employees, only those executives who really know the employees should rate them. In advertising, only persons who are among the class of consumers to whom the advertising is to be directed should rank the advertisements. Example: men who shave themselves might rank new razors differently from those who have themselves shaved by a barber.

3. *Keep the directions clearly before rater or estimator.*—Example: in ranking advertisements it is necessary to repeat frequently the injunction, "Arrange them according to the order in which these ads persuade you to buy the article."

4. *Keep separate the data for different kinds of "rankers" or estimators.*—In rating the sales employees of a department store, it was found that the ratings of the floormen differed from those of the buyers, even though both buyers

and floormen had contacts with the same employees. In advertising surveys, men and women, old and young, college educated and common school educated, and other groups may differ widely in their reactions.

The order-of-merit scale.—The order-of-merit method has been used in developing scales for traits, such as handwriting, compositions, hand sewing, and designs. Thorndike was one of the first to develop this method. He took specimens of handwriting and showed them to a number of people. He found, by consulting a group of competent judges, which specimens were considered by them to be just 68 per cent better than another specimen next in rank. Each specimen in turn was considered 68 per cent better than the specimen next in rank, and so on for the series of steps from Quality 0 to Quality 18. In similar manner, it is possible for the researcher to produce scales in any field of variables and the steps can be those perceived by any desired percentage of people such as 70 or 80 or 90 per cent. If it is desired to secure a scale which 90 per cent of the judges declare to be different for each step, then the number of steps will be modified.

In some problems it is too expensive or time-consuming to attempt to develop an order-of-merit scale in which the steps in the scale have been developed as the result of painstaking research upon a group of competent judges of the differences. In such cases, a scale may be worked out on a purely arbitrary basis. Scales of this type are often used in rating personal qualities of employees. "Personal appearance" for example may have ratings of various scales such as:

1. Slovenly.	1. Excites admiration.	1. Below average.
2. Careless.	2. Makes favorable impression.	2. Average.
3. Passable.	3. Makes satisfactory impression.	3. Above average.
4. Unimpressive.	4. Makes poor impression.	
5. Neat.	5. Arouses repulsion.	
6. Attractive.		
7. Pleasingly effective.		

The method is also used in investigating the characteristics of big business men. The extent to which I follow a budget for personal expenditures is:

I make a detailed budget and follow it closely.
I make a rough mental budget and follow it.
I make a rough mental budget but follow it only slightly.
I have no budget, but I should have one.
I do not have a budget of any sort and do not care for one.

Conklin and Sutherland made a study of 40 jokes and used for their scale the following:

1. Very best joke possible.
2. Excellent joke.
3. Very, very good joke.
4. Very good joke.
5. Good joke.
6. Funny, not a good joke.
7. Very absurd, almost funny.
8. More than slightly absurd.
9. Just slightly absurd.
10. Dull, stupid, not even absurd.

The investigation made by Conklin and Sutherland is of special interest, because they experimented upon the correlation between a series of jokes when ranked by the order-of-merit method and when ranked on the basis of the order-of-merit scale. The coefficient of correlation between the two orders was +.55.[2]

Certain differences between the order-of-merit method and the order-of-merit scale may be mentioned. In the order-of-merit method, each specimen is evaluated in its relation to all the other members of the series. As the number of specimens increases, the difficulty of judging increases. On the other hand, in the order-of-merit scale method, each specimen is compared with the scale independently of all the others in the series. The scale method is less fatiguing, because fewer relationships need be kept in mind. The scale of values method is also more satisfying to the rater who ranks several series of persons or reactions, as in the problems of an executive who may have to rank the employees of two departments. One department may be largely composed of employees who are making $10,000 per year. The other department may consist of clerks whose market value may be $20 per week. The order-of-merit method would not be nearly so satisfying to the executive as the order-of-merit scale of comparative values, where the ratings may be bunched at either end of the scale.

[2] Conklin, E. G., and Sutherland, J. W.: "A Comparison of the Scale of Values Method with the Order of Merit Method," *Journal of Experimental Psychology*, 1923, vol. 6, p. 44 ff.

When the units or reactions of a series are to be placed in groups in accordance with some scale, but the number of units in each group is not limited, it is well to have only four or five degrees or groups in the scale. The experiments of Hollingworth [3] and Poffenberger [4] indicate that it is very difficult for judges to make differentiations between degrees or groups where there are more than four or five shades of distinction. It is probable that the reliability would be low for judgments of employees were several executives to attempt to rank a number of employees into groups of ability such as the following:

Very, very exceptional.
Very exceptional.
Exceptional.
Excellent.
Very, very good.
Very good.
Good.
High average.
Average.
Low average.
Rather poor.
Poor.
Very poor.

It would be far easier for the executive to classify employees into four groups such as:

Excellent.
Good.
Average.
Below average.

Many modifications may be made in the order-of-merit scale method and some are indicated in other investiga-

[3] Hollingworth, H. L.: "Experimental Studies in Judgment," *Psychological Review*, 1911, vol. 18, p. 132.
[4] Poffenberger, A. T.: "Psychology in Advertising," pp. 110, 118, A. W. Shaw Co., 1926.

tions, such as in the selection of a trade name, but the method of ranking is basically the same.

The measurement of relationship between two series rather than differences within one series.—Psychologists have conducted thousands of investigations in which they have attempted to find how two or more series of measures correlate. This kind of computation received an impetus from the attempts to find how tests of general intelligence correlated with other tests or measurements. Problems, such as the correlation between grades in high school and grades in college, grades in one subject compared with grades in another, height and its relation to intelligence, the "pulling power" of ads when evaluated in the laboratory and when judged on the basis of the number of inquiries, number of years in school and sales of life insurance, etc., are only a few examples of the many attempts to measure relationship between two series. To enable scientists to compare the results of their researches and to increase the accuracy of their own studies, they have resorted to mathematical formulas, such as the Pearson Product-Moment formula and the Spearman Rank-Difference method of computing the coefficient of correlation. The computations of these formulas give to the scientists, in terms of one figure, the relationship between two variables. We shall illustrate the use of the latter formula with an example which shows the method of computation rather than indicate all the facts that would have to be considered when using the formula.

Let us assume that ten students in a class take a mid-semester quiz. Would it be possible to predict the final grades of the students on the basis of what they did in the quiz? Most persons would expect to find some definite relation between quiz grades and final grades. It would vary with certain factors, such as the instructors, the courses, and the teaching methods. Let us assume that at the end of the mid-semester quiz the names and the grades of the students are as follows:

Names	*Quiz Grade*	*Final Grade*
Brown, John S.	71	71
Bundit, William F.	91	85
Devern, Samuel P.	85	90
Everson, Paul T.	88	80
Fullerton, Newton	60	72
Graff, Marion	77	70
Hunter, Lewis	60	50
Jutterton, Isaac	75	75
Lewisorn, Beatrice	72	65
Turner, B. Houghton	78	80

By inspection of the grades of the two examinations, we recognize that the students who did well on the quiz also *tended* to do well on the final examination. There are some differences, as in the case of the two students who made 60 on the quiz. One of them did better and the other did worse on the final examination. It is necessary, therefore, to have a simple device for the expression of the correlation. The Spearman Rank-Difference formula is:

$$\rho = 1 - \frac{6\Sigma d^2}{n(n^2-1)}$$

"ρ" stands for the ratio of correlation, or the measurement of correspondence, and is usually called the coefficient of correlation. "d" stands for the differences in rank of the two series of measurements. The number of items in the series is indicated by "n," which is 10 in this problem. "Σ" is the symbol for "sum of."

The correlation for the above two series is found by the method illustrated here:

Names	*Quiz Grade*	*Final Grade*	*Rank in Quiz*	*Rank in Final*	*d*	d^2
Brown, John S.	71	71	8	7	1	1
Bundit, William F.	91	85	1	2	1	1
Devern, Samuel P.	85	90	3	1	2	4
Everson, Paul T.	88	80	2	3.5	1.5	2.25
Fullerton, Newton	60	72	9.5	6	3.5	12.25
Graff, Marion	77	70	5	8	3	9
Hunter, Lewis	60	50	9.5	10	.5	.25
Jutterton, Isaac	75	75	6	5	1	1
Lewisorn, Beatrice	72	65	7	9	2	4
Turner, B. Houghton	78	80	4	3.5	.5	.25
						35.00

$$\text{The sum of } d^2 = 35$$
$$n = 10$$
$$n(n^2-1) = 990$$
$$\text{Hence, } 1 - \frac{6 \times 35}{990} = 1 - \frac{210}{990} = 1.00 - .21 = +.79$$

By use of the formula, we now know that the relationship between quiz grade and final grade in that course was +.79. The relation was positive. That is, those who did well in the quiz tended to do well in the final examination. If the answer had been —.79, then the relation would have been in inverse order; that is, those who did well in the quiz tended to do poorly in the final examination and those who did poorly in the quiz tended to do well in the final examination.

The question naturally arises in the above problem: "Does the coefficient of correlation of +.79 mean that 79 per cent of the students who did well on the quiz also did well on the final examination?" It does not. The coefficient of correlation, as stated above and as it is usually given in research reports, is not on a percentage basis. To put it on a percentage basis, it is necessary to compute its "per cent of better than chance coincidence." The formula is:

$$\textit{Per cent of better than chance coincidence} = 1 - \sqrt{1-\rho^2}$$

By use of this formula we see that the above correlation of +.79 means that there was a per cent of better than chance coincidence in this case of about 0.39. To assist the business man in judging the values of coefficients of correlation, it is well for him to keep in mind the following general and rough evaluations from the predictive standpoint:

Coefficients	*Their Predictive Value*
0.00 to 0.20	No correlation or chance
0.20 to 0.40	Slight correlation
0.40 to 0.70	Definite correlation, but little predictive value
0.70 to 1.00	Correlation of definite predictive value

When using the coefficient of correlation, it is necessary to be a trained statistician, because of the many possibilities

for erroneous conclusions. In the above example of ten students, we could not say that the class of next year would do the same and that we could, therefore, omit the final examination entirely. It might not be safe to omit the final examination in the following year, even if the coefficient of correlation had been +.95. The number of students studied was small. To take care of this factor the statisticians use the formula for finding the Probable Error (P. E.):[5]

$$\text{Probable error of the correlation} = .6745 \frac{1-\rho^2}{\sqrt{n}}$$

In this example of correlation, where the coefficient of correlation is +.79 and the number of cases is 10, the P. E. is ±.08. *When the coefficient of correlation is less than four times its probable error, the coefficient indicates no predictive value, regardless of how near to 1.00 it may be.* In this case the coefficient is almost ten times its probable error and we are safe in saying, assuming all other factors to be equivalent, that the coefficient of correlation of .79 indicates a better than chance correspondence. In the long run, by basing estimates of students' final grades upon their quiz grades, predictions would be right more often than wrong. It would, however, be dangerous to try to predict any one student's grade on the basis of the quiz grade only. The predictions are applicable to groups rather than to specific individuals.

As previously stated, coefficients of correlation are not on a percentage basis. Nor is a prediction reliable for any one individual. *A high coefficient of correlation really means that, when one variable is given, the other can be predicted within a certain range.* The range is determined by the amount of the coefficient of correlation, the probable error,

[5] A method that is more exact than the formula quoted here is mentioned by Walter C. Eells: "Formulas for Probable Errors of Coefficients of Correlation," *Journal of the American Statistical Association*, June, 1929, p. 170, and is

$$\text{P. E. } \rho = \frac{0.6745\ (1-\rho^2)}{\sqrt{n}} \left\{ (1 + .086\rho^2 + .013\rho^4 + .002\rho^6) \right\}$$

the soundness of the units of measurements, and other factors which are recognized by the psychological researchers. The above discussion of a very technical field has been presented, not to train the business man in the use of these methods, but rather to indicate how he should interpret statistics quoted by psychologists. It is also hoped that the business man who handles data of this sort will recognize the pitfalls and consult with statisticians of the biometrical fields when he attempts to carry on investigations in relationships between human reactions.

TABLE LXVIII

PREDICTIVE VALUES (CHANCES IN 100) FOR CORRELATION COEFFICIENTS (r).*

r	*Chances in* 100	*r*	*Chances in* 100
.00	50	.55	58
.05	50	.60	60
.10	50	.65	63
.15	50	.70	66
.20	51	.75	69
.25	51	.80	74
.30	52	.85	80
.35	53	.866	82
.40	54	.90	89
.45	55	.95	97
.50	56	1.00	100

The probability table.—The most usable method of showing the relation between two series of measurements is that of the probability table. Let us assume that we have given a psychological test to the 200 salesmen of a sales organization. From the office records, we can find the total values of the sales made by each salesman during a definite period of time, such as one year.

We can then arrange, in order of rank in sales, the names of all the 200 salesmen. That is, the salesman who sold the most will have his name at the top of the list; the second best salesman will be second on the list; and so on to the end of the list, the poorest salesman being last. After the names have been arranged in order of merit, divide

* Fryer, Douglas, and Lanier, Lyle H.: "Prediction in Terms of Chances in 100 from the Correlation Coefficient," *Industrial Psychology*, May, 1927, p. 261.

the main group into five groups of equal number or quintiles. In this case, a quintile would be one-fifth of 200, or 40. On the list of names, draw a line under the names of the fortieth, eightieth, one-hundred-twentieth, one-hundred-sixtieth, and two-hundredth names. This will show in what quintile each salesman stands: whether he is in the best fifth of the organization, second best fifth, middle or third fifth, fourth or second lowest fifth, or fifth and lowest fifth of the group.

The above procedure should also be used for the scores in the psychological test. This list would show the names of the salesmen and their quintile rank from the standpoint of their scores in the test. On this second list should be shown the quintile position of each salesman from the standpoint of sales. The second list would then be in the following form:

TABLE LXIX

Name of Salesman	*Score in test*	*Rank in test*	*Quintile in sales*
Waters, Samuel M.	191	1	2nd
Brown, M. William	190	2	1st
Smithe, J. B.	188	3	1st
Fraser, Absalom	187	4	1st
Winters, Andrew	185	5	1st
Buell, Joseph R.	184	6	3rd
Callow, Daniel D.	183	7	1st
Yerbe, B. L.	182	8.5	1st
Wabash, Cameron	182	8.5	3rd
Devender, Gabriel	180	10.5	1st
Everett, James B.	180	10.5	1st
Barton, B. Gilbert	179	12	1st
Carney, Robert N.	178	13	5th
Farmer, Walter M.	177	14	1st
Harlow, Benton	176	15	1st
Opern, Laidlaw	175	16	2nd
Nenow, F. T.	174	17	1st
Henderson, K. B.	172	18	5th
Kerbe, L. O.	170	21	1st
Loomis, H. B.	170	21	1st
Barber, J. B.	170	21	4th
Romer, Rupert	170	21	3rd
Johnson, Charles	170	21	1st
Alder, Lincoln	169	24	1st
Truston, G. F.	168	25	2nd
Simons, Wilson	167	26	1st

TABLE LXIX *(Continued)*

Name of Salesman	*Score in test*	*Rank in test*	*Quintile in sales*
Ubert, Kramer	166	27.5	1st
Imberton, Lewis	166	27.5	3rd
Hartlen, B. C.	165	29	1st
Solomon, Christian	164	30	1st
Josephon, Q. R.	163	31	1st
Robertson, Charles	162	32	1st
Browne, Y. K.	160	33	1st
Buelow, Daniel	159	35	1st
Venner, N. Y.	159	35	1st
Anderson, B. B.	159	35	3rd
Rapier, George	158	37	4th
Denton, Isaac	157	38	2nd
Draper, Andrew	156	39	2nd
Flood, T. T.	156	40	3rd

All the above salesmen are in the first quintile in test scores. They are not, however, in the first quintile in sales ability. This indicates that the relation between test score and sales record is not a perfect relation. That is, some men who score high in the test score low in sales record. But they are few in number compared with those who are high in both the test and the sales record.

In this tabulation, the number in each "Quintile in sales" is:

Quintile in test score	*Quintile in sales*				
	1st	*2nd*	*3rd*	*4th*	*5th*
First	25	5	6	2	2
	62.5%	12.5%	15%	5%	5%

The percentages are found by dividing the number of units in each "Quintile in sales" by the total number in the quintile, or 40, as in the above, where twenty-five is 62.5 per cent of 40; five is 12.5 per cent; six is 15 per cent; and two is 5 per cent.

The tabulation now indicates that, if a salesman of this organization makes a score of 156 or above in this psychological test, he is in the first or uppermost quintile in the test. With respect to sales record, the probabilities for each of the quintiles are that he also has 62½ chances out

of 100 that he will also be in the uppermost or 1st quintile in sales. He also has 12½ chances of being in the 2nd quintile, 15 chances of being in the 3rd quintile, and 5 chances of being in the 4th or 5th quintile. This means that, if an applicant for a sales position in that organization takes the psychological test and scores 156 or above in the test, the chances are nine out of ten that he will be in the middle or upper two-fifths in sales record at the end of the year. This probability, of course, is dependent upon the oft-stated fact that all other factors must be of equivalent importance.

If an investigation of this kind is completed for all quintiles, the probability table of test scores will be similar to the following:

TABLE LXX

Quintile in test score	*Quintile in sales*				
	1st	*2nd*	*3rd*	*4th*	*5th*
First	25	5	6	2	2
Second	8	15	13	2	2
Third	2	10	10	14	4
Fourth	2	6	8	14	10
Fifth	3	4	3	8	22

When the above table is translated into percentages, the following results:

TABLE LXXI

Quintile in test score	*Quintile in sales*				
	1st	*2nd*	*3rd*	*4th*	*5th*
First	62.5%	12.5%	15%	5%	5%
Second	20	37.5	32.5	5	5
Third	5	25	25	35	10
Fourth	5	15	20	35	25
Fifth	7.5	10	7.5	20	55

With a probability table of this kind at hand, an employment manager or executive can predict the probable sales ability of any applicant who takes the psychological test. This type of probability table can be used to find the relation between any series of measurements which correlate.

The larger the group, the more reliable the prediction. This method should not be used in making predictions, unless the table has been prepared by trial on at least 100 cases.

Sometimes better correlations and more useful tables can be made by dividing the group into quarters or thirds rather than fifths.

Measures of central tendency.—The statisticians use the *mean* and the *median* to note the central tendency of the series of measures. The mean is synonymous with the *arithmetic average.* In a series where the measures are distributed in a perfect normal frequency curve, the mean and the median are the same.

We determine the arithmetic mean or average in the usual manner. Let us compute the average wealth for the following members of a summer camp:

Occupation	*No. in the occupation*	*Wealth of each man*	*Total for the occupation*
Lawyer	1	$ 10,000	$ 10,000
Teacher	2	{ 4,000 } { 5,000 }	9,000
Bank clerk	3	2,000	6,000
Salesman	2	15,000	30,000
Undertaker	1	20,000	20,000
Financier	1	1,000,000	1,000,000
Total number of people	10		
Total wealth for the camp			$1,075,000
Average wealth			107,500

In this case, the members of the summer camp can truthfully say that the average wealth for each member of their little community is over $100,000. However, only one member of the community can afford the standard of living which $100,000 would permit. Per capita figures frequently give a wrong impression, because the average always takes into consideration all the measures of the series. To overcome the effect of extremes in the series, the median is used.

The *median* is that measure of a series, arranged in order of magnitude, above which and below which, one-half the measures fall. Sometimes it is the middlemost measure.

When the members of the above summer camp are arranged in order of wealth the series is:

Bank clerk	$ 2,000
Bank clerk	2,000
Bank clerk	2,000
Teacher	4,000
Teacher	5,000
Lawyer	10,000
Salesman	15,000
Salesman	15,000
Undertaker	20,000
Financier	1,000,000

In this example, what is the median wealth? We cannot take the middlemost measure, because we have an even number of cases. If we had eleven members of the camp, we could take the wealth of the sixth member of the series as the median wealth of the community. In the above case of ten members we can find the median wealth of the community by calculating the arithmetic average of the two middle members of the series. The median wealth in this camp is $7,500. This more truly represents the per capita wealth of the community than the average wealth. At any rate, a salesman would be more justified in approaching the members of the community with a product that could be afforded only by people whose incomes are $7,500 than would the salesman whose product could be afforded only by persons whose incomes are over $100,000.

In this example, the mean and the median are not the same in value, because the curve of distribution is skewed toward one end of the scale. In general, when a series of measures is truly representative of human nature, the mean and the median will be approximately the same.

In some situations in business, neither the mean nor the median is of value as a measure of central tendency. The *mode* may have to be used. The *mode* is the measure that occurs most frequently. Let us assume that the general

manager of a concern manufacturing window shades sends an investigator out to measure the sizes of the windows in a community. The investigator returns with the data and then computes the mean and the median sizes of windows. These sizes would have no value for determining the sizes of shades to be manufactured. Theoretically, not one window might fit the mean size and only one might fit the median size. The modal sizes would be better, as the mode is that measure which occurs most frequently in the series. In the case of the members of the summer camp, the modal wealth of the community is $2,000, because that is the amount of income which occurs most often.

When differences between averages indicate real differences.—Business men frequently make erroneous claims in regard to averages as evidence of significant differences between groups. A typical example is that of the general manager of a company who called to his office the advertising manager and said: "Mr. Advertising Man, your advertising is not so good this year as it was last year. Here are some figures to prove it. We have been advertising in the trade journal, 'X,' for several years. We always make a definite number of sales from each of the advertisements in that journal. I have here the figures of sales made last year and the sales made this year from the advertisements for the first nine months of each year. Incidentally, the circulation is the same for the two years. As you see, we made an average of 74 sales from our advertisements last year and an average of only 72 sales this year. This seems to indicate that our advertising is poorer."

Was the general manager justified in claiming that the advertising was poorer this year than last year? Several mathematical formulas might be used in a problem of this kind, but we shall illustrate one method of finding out whether a difference between averages is really significant enough to justify a generalization. Let us assume that the figures of the general manager for the sales of the nine months of each of the two years were as follows:

	Sales from 9 ads last year	*Sales from 9 ads this year*
January	90	90
February	88	85
March	88	85
April	76	78
May	74	70
June	81	80
July	60	52
August	55	58
September	54	50
Total	666	648
Average	74	72

The various steps in the procedure of determining the significance of group differences when stated in terms of averages are:

1. Determine the Standard Deviation of the Distribution (S. D. *dis.*). The formula is:

$$\text{S.D. } dis. = \sqrt{\frac{\Sigma d^2}{n}}$$

In the formula, n refers to the number of cases, which here is 9.

The d^2 is found by computing the deviation of each measure (sales made) from the average of the group.

Better Group of Ads					Poorer Group of Ads				
Av.	minus	Sales =	d	d^2	Av.	minus	Sales =	d	d^2
74	from	90	16	256	72	from	90	18	324
74	"	88	14	196	72	"	85	13	169
74	"	88	14	196	72	"	85	13	169
74	"	76	2	4	72	"	78	6	36
74	"	74	0	0	72	"	70	—2	4
74	"	81	7	49	72	"	80	8	64
74	"	60	—14	196	72	"	52	—20	400
74	"	55	—19	361	72	"	58	—14	196
74	"	54	—20	400	72	"	50	—22	484
				Σd^2=1658					Σd^2=1846

In the above computation of the deviations for each measure from the average, no attention need be paid to

plus or minus signs, because their squares always result in plus products.

The S. D. *dis.* of the better and the poorer advertisements (last year's sales compared with this year's sales) is:

$$\text{S. D. } dis. = \frac{\sqrt{1658}}{9} \quad \text{and} \quad \frac{\sqrt{1846}}{9}$$

$$= 13.5 \quad \text{and} \quad 14.3$$

2. Then change the Standard Deviation of the Distribution into the Standard Deviation of the Average (S. D. *av.*). The formula is:

$$\text{S. D. } av. = \frac{\text{S. D. } dis.}{\sqrt{n}}$$

n, as before, refers to the number of cases, or 9, in this problem. The S. D. *av.* of the better and the poorer groups of advertisements are:

$$\text{S. D. } av. = \frac{13.5}{\sqrt{9}} \quad \text{and} \quad \frac{14.3}{\sqrt{9}} \quad \text{or}$$

$$= \frac{13.5}{3} \quad \text{and} \quad \frac{14.3}{3} \quad \text{or}$$

$$= 4.5 \quad \text{and} \quad 4.8$$

These latter two figures, 4.5 and 4.8, indicate the unreliability of their respective averages.

3. We now know the averages and their unreliability and we can determine the significance of the difference in sales between the two groups of advertisements. To do this, we must find the Standard Deviation of the Difference (S. D. *diff.*). The formula is:

$$\text{S.D. } diff. = \sqrt{\frac{\text{S.D.}^2\, av._1}{n} + \frac{\text{S.D.}^2\, av._2}{n}}$$

The S.D.$av._1$ and S.D.$av._2$ represent the standard deviations of the two averages which are 4.5 and 4.8 in this problem.

$$\text{S. D. } diff. = \sqrt{\frac{4.5^2}{9} + \frac{4.8^2}{9}}$$

$$= \sqrt{2.25 + 2.56}$$

$$= \sqrt{4.81}$$

$$= 2.19$$

4. Here the standard deviation or error of the difference between the two groups is 2.19. The difference is 2 points. Is this difference really important enough to say that, on the basis of sales averages, the advertisements were better last year than this year? The answer is "No," because the difference between the averages should be about three times the S. D. *diff.* if it is to be considered a significant difference. With a standard deviation of the difference of 2.19, the difference between the averages of the two groups of advertisements would have to be, not 2 points, but 6 or 7 points. Hence, in this particular case, the general manager was not justified in claiming that the advertising was better last year than this year.

The above method of determining whether averages indicate real group differences can also be applied to problems of hiring employees. For example: if psychological tests are used in the selection of salesmen, the best ten salesmen may have a higher average test score than the average score of the poorest ten salesmen. The significance of the difference between the two averages should be verified. Laird has given an excellent discussion of the method presented here. He says: "The standard deviation makes it possible for one to prophesy numerically from the sampling of a few cases what might be found if all possible cases had been recorded. If the difference is twice the standard deviation, the chances are 21 to 1 that the observed difference is the true difference that would have been found if all salesmen in the country had been studied. When the difference is three times its standard deviation, the chances are 369 to 1. Whenever two or more groups are compared, the standard deviation of the difference should always be computed.

Without it no one can safely 'guess' at the significance of the findings." [6]

Correcting for guessing.—Teachers of psychology and other subjects have been giving objective questions of the true-false type for a number of years. Students are often given a set of questions similar to the 20 true-false statements at the end of this chapter and are told to put a circle around the T if the statement is true, and to put a circle around the F if it is false. If the answer is not known, the student may omit the question. Statistically, a student might not read this chapter at all and yet be able to have the answers correct for one-half the questions. To overcome the factor of chance, the answers are usually scored so that the student is penalized for each question incorrectly answered. This is done on the theory that he will guess right about as often as he guesses wrong. The score for an examination of this type is:

$$\text{Score} = \frac{\text{Total number}}{\text{of questions}} - [\text{No. doubtful} + (2 \times \text{No. wrong})]$$

In the case of the 20 questions at the end of this chapter, a student who has not read the chapter might answer 16 and have 4 blanks as doubtful or unknown to him. By chance, 8 should be right, and 8, wrong. His score for the questions would then be:

$$\begin{aligned} \text{Score} &= 20 - [4 + (2 \times 8)] \\ &= 0 \end{aligned}$$

By experiment, we find that some students can answer some true-false questions, even though they have not studied the lesson for which they are quizzed. From contacts with other subjects or materials related to the course, their guesses will be more often right than wrong. The 20 true-false questions at the end of this chapter were given to a group of intelligent adults who had not read the chapter at all, and they made an average score of 3 instead of the

[6] Laird, Donald A.: "Psychology of Selecting Men," pp. 232, 233. McGraw-Hill Book Co., 1927.

score of 0. Hence, the correct method of scoring for these questions would be:

$$\text{Score} = \frac{\text{Total number}}{\text{of questions}} - \left[\frac{\text{No. doubtful} +}{(2 \times \text{No. wrong})}\right] - \frac{\text{Average No. known}}{\text{from other sources}}$$

If a correction is made for overlapping information acquired from sources other than the course itself, it is necessary to standardize the questions on a group having intelligence and experience, similar to that of the students who are supposed to have studied the material before taking the examination.

This method of correcting for guessing has been used in advertising researches. Poffenberger also recommends it for testing the recognition values of advertisements. The experimenter shows, to a person, a series of 20 advertisements, one at a time, and at a uniform rate, let us say one every 3 seconds. After an interval of time which has been chosen to suit the purpose of the experiment, the original 20 advertisements, mixed in a random fashion with 20 not seen before, are presented to the subject with instructions to pick from the group of 40 advertisements those he did see before, those he did not see before, and those about which he is doubtful. If we are interested in finding the power of recognition of the person tested, we can calculate it as follows: The advertisements reported "doubtful" show an absence of recognition; consequently, if no mistakes were made in the other two groups, "seen before" and "not seen before," his recognition score would be "total number" minus "doubtful." But he may have said that he saw certain advertisements when he really did not, and that he did not see certain ones when he really did see them. Such errors show a lack of recognition and should be added to the doubtful. Furthermore, if these errors were due to guessing, they represent only the cases where the guess was wrong, hence, one can expect as many guesses to be right as wrong. We have, then, a score for recognition made up as follows:

$$Recognition = \text{Total No. of advertisements} - [\text{No. doubtful} + (2 \times \text{No. wrong})]$$

This formula may be illustrated by means of a concrete case. Assume that a certain person took the test in which 20 advertisements were shown originally and later 40 were presented for recognition, and that he reported:

Seen before: 15, of which 3 were wrong.
Not seen before: 10, of which 2 were wrong.
Doubtful: 15.

His score would be

$$40 - [15 + (2 \times 5)] = 15.$$

By dividing this score by the total number of advertisements one can transmute it into a percentage, or 37.5 per cent.[7]

Conclusion.—In the first chapter of this book, the reader was given a list of the psychological problems of normal individuals with special tabulations of the problems of business men. In the second chapter, the claim was made that the basic attitude of the leader in business is that of adjustment to a changing rate in the rate of change. Succeeding chapters dealt with certain aspects of psychology in business relations or the methods of predicting and influencing behavior in business situations. The research "tools" presented in this chapter are not comprehensive, but the discussion is an attempt to stimulate certain types of business leaders and students of business to go on and acquire further skills in measuring human reactions. At any rate, exact methods are coming to play a vital part in our adjustments to the new American tempo.

Projects.

T. F. 1. A minus coefficient of correlation of a given value such as −.80 has just as great predictive value as a +.80 coefficient.

T. F. 2. When two sets of factors correlate, a high correlation means that the one factor is caused by the other.

[7] Poffenberger, A. T.: "Psychology in Advertising," pp. 510, 511, A. W. Shaw Co., 1925.

T. F. 3. Most business corporations now conduct a business research department.

T. F. 4. All statistical organizations that advertise themselves in trade journals as research organizations can be depended upon to submit accurate conclusions to their clients.

T. F. 5. The main purpose of business research is that of finding out why certain unpleasant events occur in the business.

T. F. 6. The total range of coefficients of correlation is +1.00 to 0.

T. F. 7. A synonym for the *normal frequency curve* is the *curve of chance*.

T. F. 8. All conclusions of business researches should be accepted at their face value and applied to the business.

T. F. 9. It is practically possible to get answers to a hundred questions by means of a mailed questionnaire.

T. F. 10. The identity of the sender of a questionnaire should always be hidden.

T. F. 11. Salesmen should be used in making market surveys because they are accustomed to meeting people.

T. F. 12. The order-of-merit scale is easier to operate than the simple order-of-merit method.

T. F. 13. When estimates are classified into groups of different values, it is well to have six or more groups.

T. F. 14. To have predictive value, the coefficient of correlation must be more than four times its probable error.

T. F. 15. The business executive can understand the meaning of the coefficient of correlation more easily than the probability table.

T. F. 16. The Median is not affected by the values of measures at the extreme ends of the series.

T. F. 17. The Standard Deviation of the Difference between averages can be computed for more than two averages.

T. F. 18. Abstract qualities can be treated by quantitative methods.

T. F. 19. When ρ is .80 and n is 20, the per cent of better than chance coincidence is 14.

T. F. 20. The P. E. of question number 19 is $\pm .05$.

21. Distinguish between the old-time sales manager who depends upon pep talks and free entertainment to customers to produce sales and the scientifically inclined manager who depends upon carefully made researches. What are some advantages of each? Some disadvantages? What kinds of concerns or industries tend to have one type of manager rather than the other? What is the effect of mergers upon this situation? What is the effect of monopolies?

22. Statistically considered, is the difference between two and three the same as the difference between ten and eleven?

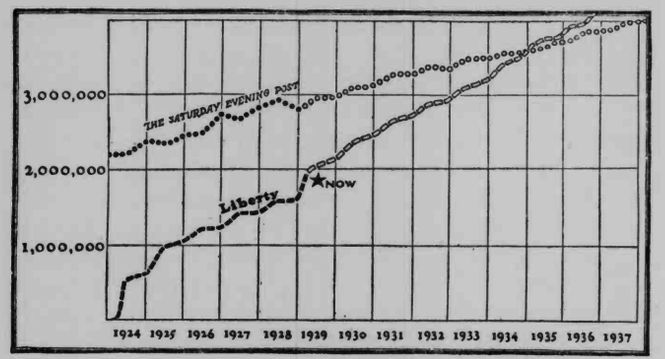


Fig. 57—In *Printers' Ink Monthly*, March, 1929, the above chart appeared. The exponents of *Liberty* estimated that in 1935 *Liberty* would have the largest magazine circulation in the world. Analyze the validity of the estimate.

23. Discuss statistical data of business which are often compared but which really are not comparable, such as bond prices during the Civil War and World War or wages in London and Chicago. Is homogeneity in comparisons of psychological data possible?

24. Distinguish between immediate or superficial causes and remote or fundamental causes. How does this apply to retail costs? To unemployment? To sales records?

25. Construct some graphs and vary the class intervals to see the increase and the decrease in fluctuations for the same data.

APPENDIX

Appendix

TABLE LXXII

KEY TO THE EXECUTIVE REACTION PATTERN TEST

1.	*a.*	+10	6.	*a.*	0
	b.	+ 2		*b.*	+ 3
	c.	— 3		*c.*	0
	d.	— 5		*d.*	— 5
	e.	— 5		*e.*	0
2.	*a.*	+ 6	7.	*a.*	+ 1
	b.	+ 4		*b.*	+ 3
	c.	— 6		*c.*	— 5
	d.	— 2		*d.*	0
	e.	— 6		*e.*	0
3.	*a.*	0	8.	*a.*	+ 6
	b.	+ 2		*b.*	+ 5
	c.	— 5		*c.*	0
	d.	— 2		*d.*	— 1
	e.	— 3		*e.*	— 5
4.	*a.*	+ 3		*f.*	— 5
	b.	0	*9.	*a.*	+ 2
	c.	— 1		*b.*	0
	d.	— 8		*c.*	+ 2
	e.	— 8		*d.*	+ 2
5.	*a.*	+ 6		*e.*	0
	b.	+ 2		*f.*	0
	c.	0		*g.*	0
	d.	— 6		*h.*	+ 2
	e.	— 8		*i.*	+ 2
				j.	+ 2

10.	*a.*	+ 2	13.	*a.*	+ 4
	b.	— 5		*b.*	— 3
	c.	— 3		*c.*	— 3
	d.	+ 3		*d.*	0
	e.	— 3		*e.*	0
11.	*a.*	+ 3	14.	*a.*	+ 5
	b.	— 1		*b.*	+ 2
	c.	— 2		*c.*	— 2
	d.	0		*d.*	0
	e.	— 5		*e.*	0
12.	*a.*	+ 4			
	b.	— 4			
	c.	— 5			
	d.	— 5			
	e.	— 5			

* Number 9 should also be scored on the total number of items underlined. If only one or two items are underlined, give no extra credit. If three or more items are underlined, give a plus score equal to the total number of items underlined. Example: if the five items, *c, d, h, i, j,* are underlined, each item having a +2 score, the total score for question No. 9 would be 10+5, or 15.

Assign plus and minus values to your own answers according to the above key. Add all the values having a plus sign. Add all those having a minus sign. Then add the two sums algebraically. Find the position of your final score in one of the six grades in the extreme left-hand column of the probability table. Read to the right and the per cent figures will indicate, statistically, the percentage of business men who made the same score in the test.

Example: of the business men who made a score of minus 40 to minus 120, 100 per cent made less than $2,500 per year; of those who made a score of plus 81 and above, 14 per cent made a salary of from $5,000 to $10,000 per year; 29 per cent, from $10,000 to $20,000 per year; and 57 per cent, $20,000 or more per year.

15. *a.* + 5
b. 0
c. — 2
d. — 3
e. — 5

16. *a.* — 6
b. + 2
c. + 1
d. 0
e. 0

17. *a.* + 4
b. — 2
c. — 5
d. — 5
e. — 5

18. *a.* + 2
b. — 2
c. 0
d. — 4
e. + 4

19. *a.* + 4
b. 0
c. — 3
d. — 4
e. + 5

20. *a.* + 4
b. — 2
c. — 4
d. — 4
e. — 4

21. *a.* + 3
b. + 6
c. — 3
d. — 3
e. — 3
f. — 3

22. *a.* — 5
b. — 5
c. + 5
d. + 5

23. *a.* — 2
b. + 6
c. 0
d. — 2
e. — 2

24. *a.* + 4
b. + 2
c. — 1
d. — 4
e. — 4
f. — 4

25. *a.* +10
b. + 5
c. 0
d. — 4
e. + 2

26. *a.* + 5
b. — 3
c. 0
d. — 6
e. — 6

27. *a.* +10
b. 0
c. — 4
d. 0
e. 0

28. *a.* + 4
b. — 4
c. — 4
d. — 4
e. — 4

TABLE LXXIII

PROBABILITY TABLE SHOWING THE RELATION BETWEEN SCORES IN EXECUTIVE REACTION PATTERN TEST AND SALARIES

Score in Test	SALARIES IN BUSINESS: *0 to $2,500 per yr.*	*$2,500 to $5,000 per yr.*	*$5,000 to $10,000 per yr.*	*$10,000 to $20,000 per yr.*	*$20,000 per yr. and up*
+81 and up	.....	....	....	14%	29%	57%
+51 to +80	.....	....	13%	22%	22%	43%
+21 to +50	.....	7%	30%	33%	21%	9%
—9 to +20	.....	15%	39%	34%	9%	3%

TABLE LXIII *(Continued)*

PROBABILITY TABLE SHOWING THE RELATION BETWEEN SCORES IN EXECUTIVE REACTION PATTERN TEST AND SALARIES

Score in Test	SALARIES IN BUSINESS: *0 to $2,500 per yr.*	*$2,500 to $5,000 per yr.*	*$5,000 to $10,000 per yr.*	*$10,000 to $20,000 per yr.*	*$20,000 per yr. and up*
—10 to —39	.....	59%	18%	18%	5%	....
—40 to —121	.....	100%	....	....	....	....
Mean.....		—23.1	+14.8	+23.0	+40.5	+62.9
Median		—25.	+13.5	+26.0	+41.0	+66.0

TABLE LXXIV

KEY TO RANKING OF 14 STUDENTS IN CHARACTER ANALYSIS EXPERIMENT (Figure 13.)

Student's letter of designation	*Rank in scholastic record*	*Rank in amount of time spent in study*	*Rank in studiousness by the 88 business men*
A	8	4	11
B	12	11	6.5
C	13.5	1	5
D	10	14	—
E	3	9	1
F	6	8	3.5
G	5	2	2
H	9	10	11
I	7	13	—
J	13.5	5	11
K	11	12	3.5
L	4	7	8.5
M	1	6	8.5
N	2	3	6.5

The least talkative two are B and G.
The boys are G, K, L, and N.

A BUSINESS ABILITY TEST[1]

Psychological tests are used to test samples of a person's ability. Tests such as this one have been found to be of help in discovering unusual and valuable capacities of people.

[1] Some tests presented here were suggested to the writer by tests which were developed by members of the Psychology Department, Carnegie Institute of Technology.

Psychological tests do not always test education, as it has been found that, in some tests, certain people who have very little education score higher than some college graduates.

Sometimes people do not like to take a psychological test because they think that, if they make a low score, it would mean that they will be failures in life. This is not true. There are many people who score low in this test, but who have succeeded in fields where this form of ability is nonessential.

This test does not test personal qualities, such as morals, persistence, willingness to work hard, honesty, etc., but does test a few other aspects of a person's mental make-up which is important in some phases of business.

This test is too difficult for any person to answer all the questions correctly. No one has ever made a score of 100 per cent on it.

Directions for Taking This Test.

Do not consult any person or book in order to answer any of the following questions. If you do not know the answer to a question, guess and pass on.

Select a quiet place for taking the test and a time when you are not likely to be interrupted. If you must stop work while taking the test, take time out at the end of a section or page.

The test is made up of 7 sections, one section to a page. At the top of each page are the words, TIME STARTED ——— and at the bottom of the page, TIME FINISHED ———. You are to keep separate time records for each page.

If you do not have some one to time you, put your watch or a clock in front of you. Before you read a word on any of the following pages, you should note the time in fractions of a minute and write the exact time that you start a section at the top of the page, after TIME STARTED ———. When you finish the page, note the time again and write it after TIME FINISHED ———. Do the same thing for each of the succeeding pages until you finish. *After you have completed the last section, do not go back and make corrections.*

The value of this test to yourself will depend upon your honesty in taking it. You are on your honor.

Time is of some importance in taking this test, but accuracy is more important than speed. Do accurate work, but work as rapidly as you can.

Now write your name at the bottom of this page.

Then note the time, turn to the next page, write the exact time after TIME STARTED ———, bear in mind that your reading of the directions is to be included in the time for taking the test, and go ahead.

TIME STARTED 4:24

Section I.—Business Facts

Explanation.—There are certain facts about general business which every man ought to know. This test is intended not to test your knowledge of the details of business, but some fundamental principles of applied business.

Directions.—Some of the statements below are true and some are false. If a statement is true, underline TRUE; if it is false, underline FALSE. If you are not sure, guess.

Examples: The Standard Oil Co. is a small concern ..... TRUE FALSE
A satisfactory rating in Bradstreet's is an important business asset ..... TRUE FALSE

1. If a bill is paid by voucher check a receipt is not legally necessary ..... TRUE FALSE
2. A check written in pencil is legally void ..... TRUE FALSE
3. A commercial letter of credit is issued by credit organizations ..... TRUE FALSE
4. It is illegal to inscribe a collection letter on the back of a postal card ..... TRUE FALSE
5. The New York Stock Exchange and the Chicago Stock Yards are in the same kind of business ..... TRUE FALSE
6. A director in a corporation can be suspended or removed from the Board of Directors by his fellow directors without consent of the stockholders..... TRUE FALSE
7. The Negotiable Instruments Act is uniform through the 48 states ..... TRUE FALSE
8. The normal business cycle is four-phase ..... TRUE FALSE
9. Fourth class mail matter can be insured ..... TRUE FALSE
10. An open account requires no collateral security .. TRUE FALSE
11. A debt is outlawed after five years in all states .... TRUE FALSE
12. The term "ad valorem" means "according to value" TRUE FALSE
13. One member in a partnership can never be held liable for the business actions of another partner... TRUE FALSE
14. Labor turnover is an important factor in the cost of producing and selling goods ..... TRUE FALSE
15. Any officer of a corporation may cash a check made payable to the corporation ..... TRUE FALSE
16. The Chairman of the Board of Directors of a corporation is appointed by the governor of the state in which the corporation has been chartered .. TRUE FALSE
17. An inventory is usually taken at the end of the fiscal year ..... TRUE FALSE
18. Any one director of a corporation can legally assume authority over the affairs of the corporation.. TRUE FALSE

19. There are ten main or central city centers of the Federal Reserve System ..... TRUE FALSE ✓
20. A defalcation is the same as a deficit ..... TRUE FALSE ✓
21. Book value of a company is roughly the value of one share of stock after you have substracted the liabilities from the assets and divided by the number of trustees ..... TRUE FALSE ✓

TIME FINISHED 4:34

TIME STARTED ——

Section II.—Business Information

Explanation.—Business men acquire business information according to their years in business and their mental alertness. The more wideawake a man is, the more general information he will pick up. This test aims to measure your range of business information.

Directions.—To complete each statement below you have a choice of four words. Underline the word that makes the truest sentence.

Example: The center of the automobile industry in the United States is —— Philadelphia, Baltimore, Detroit, Flint.

1. Forbes is a magazine of
   Finances, Needlecraft, Chain Stores, Literary.
2. "Most Miles per Dollar" is the advertising slogan of
   Firestone, Goodrich, Goodyear, Fisk.
3. Harrington Emerson is best known as a
   banker, salesman, consulting-engineer, writer.
4. A mortgage is security for a
   bond, deed, draft, stock.
5. The *Annalist* is a magazine dealing with
   sales, production, finance, chemicals.
6. "Has the Strength of Gibraltar" is the slogan of
   Metropolitan, Equitable, Prudential, Aetna.
7. Endicott-Johnson are manufacturers of
   hats, shoes, hardware, collars.
8. "The light that never fails" is the slogan of
   Aetna, Equitable, Metropolitan, Prudential.
9. Haskins & Sells are a firm of
   packers, accountants, engineers, importers.
10. The size of standard business correspondence paper is
    7 x 12, 8½ x 11, 8 x 13, 7½ x 10½.
11. Stone & Webster is a firm of
    packers, importers, engineers, brokers.
12. "Usury" is the term used for
    marginal buying, compound interest, excessive interest, bank discount.

13. The usual number of negotiable copies of a domestic bill of lading are
    one, two, three, four.
14. The dictaphone is a kind of
    typewriter, multigraph, phonograph, adder.
15. The cost of living is usually quoted in terms of
    price of eggs, savings, an index number, failures.
16. A charge made for the detention of a freight car is called
    debenture, demurrage, forfeiture, indemnity.
17. The H. J. Heinz Co. is famous for its
    revolvers, cleanser, pickles, shoes.
18. "Dollar Line" refers to:
    brokers, engineers, contractors, manufacturers.
19. C.O.D. means:
    collectible on demand, cash on delivery, cash on deposit, canceled on demand.

TIME FINISHED ——

TIME STARTED ——

Section III.—Business Arithmetic

Explanation.—Every person engaged in business must use some arithmetic. These problems will test your arithmetical knowledge.

Directions.—Find the answers to these problems as quickly as you can. Use the side of the page for figuring your work. Place all your answers in the parentheses.

1. Add 4.0125, 1.5907, 412, and 8.673 ..... ( )
2. Subtract 8⅞ from 5¾ ..... ( )
3. Multiply 3 lb. 5 oz. by 5 ..... ( )
4. Divide 69 lb. 9 oz. by 9 ..... ( )
5. If you buy two cigars at 7c. each and a pipe for 65c., how much change will you get from $2? ..... ( )
6. A train scheduled to arrive at 10:52 was 9 minutes late. At what time did it arrive? ..... ( )
7. By paying $25 a month how long will it take to pay for 10 shares of stock at $5 a share? ..... ( )
8. If you buy $550 worth of goods at 8 per cent discount, how much do you pay for the goods? ..... ( )
9. If you sold 5 shirts at $4 each and kept one-half the money and with the other one-half bought socks at 50c. per pair, how many pairs did you buy? ..... ( )
10. If 3½ tons of cinders cost $21 how much would 5¼ tons cost? ..... ( )
11. A company has assets of $100,000 and liabilities of $25,000. There are 240 shares of stock. What is the real value of each share of stock? ..... ( )
12. A merchant paid $1 for some pencils and sold them for $1.30, gaining 5 cents on each pencil. How many pencils were there? ..... ( )

13. If you receive $2,800 a year and pay one-quarter of it for rent and $1,540 for other expenses and save the balance, what percentage of your salary do you save? ( )
14. A man purchases an order of merchandise for $100 less 2/10/30 if paid within 10 days. He pays the amount in time to receive the benefit of the discount. What does he pay for the merchandise? ..... ( )
15. How much does a company lose when it can earn 16 per cent per annum on its working capital and neglects to take advantage of a cash discount of 8 per cent on a purchase of $5,000 payable in 60 days? ..... ( )

TIME FINISHED ——

TIME STARTED ——

Section IV.—Business Relations

Explanation.—In order to think "Business," it is necessary to see relationships between business facts and terms. This test will show how well you can perceive these relations.

Directions.—In each line below, the first word is to the second as the third is to one of the words in the parentheses. You are to find this word and underline it.

Example: Shoe : foot : : hat : (toe hand head band). Read this "Shoe is to foot as hat is to toe, hand, head, band." The correct answer is "head." Underscore "head" as shown below,

Shoe : foot : : hat : (toe hand head band).

1. Captain : ship : : mayor : (state city boss council).
2. Packard : car : : Conklin : (typewriter fountain pen dictaphone adding machine).
3. Friday : Saturday : : May : (July January June April).
4. First-class : Letter : : Fourth-class : (circular parcel-post post cards periodicals).
5. Owner : renter : : deed: (lease mortgage rent tax).
6. Stencil : mimeograph : : type : (multigraph dictaphone adding machine).
7. Dupont : paint : : Timken : (gears bearings guns coal).
8. Eastman : cameras : : dollar : (currency wheat aviation ship lines).
9. Typewriter : stenographer : : ledger : (clerk president accountant office-boy).
10. Partner : partnership : : stockholder : (trust stock room corporation warehouse).
11. Lehigh : railroad : : Mazda : (trains lights cars autos).
12. Edison : inventor : : Babson : (engineer statistician manufacturer merchant).
13. Detroit : automobiles : : Chicago : (trolley-cars bicycles brewing meat-packing).
14. Amendment : law : : codicil : (mortgage invoice will note).

15. Styleplus : clothes : : Jonteel : (tobacco face-powder jewelry soup).
16. Property : deed : : insurance : (policy premium assessment tax).
17. Machine : patent : : book : (read trade-mark copyright sell).
18. Red : color : : taffeta : (drink stone cloth book).
19. Typewriter : L. C. Smith : : mimeograph : (A. B. Dick T. E. Wilson T. N. Vail G. W. Perkins).
20. Machine : operator : : stenographer : (boss book typewriter income).
21. New York : United States : : Dresden : (England France Germany Belgium).
22. Penny : copper : : dime : (quarter silver money nickel).
23. Holding Co. : subsidiaries : : officer : (privates swimmers horses cannons).
24. Typewriter : letter : : linotype : (furnace automobile newspaper).
25. Prosperity : expansion : : depression : (sorrow inflation strokes liquidation).

TIME FINISHED ——

TIME STARTED ——

Section V.—Business Judgment

Explanation.—The big business men of the country are the ones who are able to pick out the important factors in a situation. This test requires you to distinguish between the essential and the nonessential.

Directions.—In each row of words below underline two of the five words in the parentheses. These two words are the things which the word in capitals *always has* or *always involves*.

Examples: MAN (body cane head shoes teeth).
A man always has a body and a head.

DEBT (interest creditor debtor payment sale).
A debt always involves a debtor and a creditor.

1. INVESTMENT (dividends stocks bonds investor transaction).
2. INVOICE (debits credits sales price balance).
3. NOTE (amount security signature interest indorsement).
4. ADVERTISEMENT (picture name copy trade-mark medium).
5. LIFE INSURANCE (premium discount copyright terms loan value).
6. RECEIPT (security signature amount indorsement place).
7. FACTORY (machinery workers salesmen creditors losses).
8. EMPLOYER (debtors insurance employees pay-rolls vacant jobs).
9. REAL ESTATE (income deeds mortgages legal record lien).
10. RAILROAD (ticket agent rolling stock depot track telephone).
11. PASSPORT (permission document seaport ticket cargo).
12. PERSONAL LIBEL (defamation litigation record lien license).
13. INDORSEMENT (injunction interest signature indorser lien).
14. FRANK (exemption telegram sender fraud draft).
15. FORECLOSURE (sale fraud mortgage bailee extradition).

16. EMBARGO (detention security date bargain sale).
17. DEED (legal record oath seal attorney mortgage).
18. CORPORATION (stockholders sales officers bonds dividends).
19. CLEARING HOUSE (lower house of Congress, shipping department, banks, state legislature, checks).
20. SPECULATION (fraud speculator chance mining stock).

TIME FINISHED ———

TIME STARTED ———

Section VI.—Business Letter Writing

Explanation.—One of the requirements of business is the ability to write a good business letter and to correct clerical errors.

Directions.—Correct all errors in this letter. Cross out and reword where desirable. Correct obsolete phrasing. Make the quality of the letter such that you would be willing to sign it.

324 Main Street
Syracuse, New York
June 31, 1922

Mr. Jas T. Doe
74 Broodway
New York N. Y.
Dear Mr. Jas:

Your kind favor of the 28th inst. has been referred to the writer and contents carefully noted. I secured the following statement of your account from the accounting Dept. and find it best to send you a copy rather than a formal statement.

Jan. 20	10 Nom. 2A Watches at	$2.00	$20.00
Jan. 28	10 Nom. 4C Watches at	2.00	28.00
Feb. 1	4 Nom. 16 Pins at	.40	1 60
Feb. 10	6 Nom. 64 Pins at	.64	6.40
Feb. 16	9 Nom. 44 Clasps at	1.02	9.18
Feb. 22	12 Nom. 18 Pens at	.98	10.76
		Total	$55.94

You wish to know whether or not we can give a special reduxion on our No. 2B vases. The manager don't like to make special prises but I seen him about it and he made this offer:

In 1 doz. lots, at $17.00 per dozen
In 5 doz. lots, at $18.00 per dozen

Of course, with the above special prise goes our regular cash discount of 05 per cent if paid after 10 days. I beg to remain,

Very truly,
K. K. Jones
EXL Jewelry Company

TIME FINISHED ———

TIME STARTED ———

Section VII.—Memory and Classification

Explanation.—The aim of this test is to see how well you can understand directions and hold them in mind long enough to carry them out. It may be that you have never done this particular thing, but you have certainly had to do this general sort of thing. The ability to follow directions is essential to business success.

Directions.—(1) Place a check mark in column (1) after the name of each man who is less than 40 years old and has been in business more than 5 years and gets a salary of over $2,500.

(2) Place a check mark in column (2) after the name of each man who is over 20 years old and has been in business more than 4 years and gets a salary of less than $3,500.

(3) Place a check mark in column (3) after all other names.

Name	*Age*	*Years in business*	*Salary*	*Columns* (1)	(2)	(3)
Adams, J. B.	38	9	$2,550	✓	✓	
Carter, R. R.	22	2	1,250			✓
Cole, M. J.	44	14	4,300		✓	
Dalton, P. J.	21	7	1,800			✓
Eaton, M. H.	52	19	6,200		✓	
Farrell, T. K.	39	12	2,750			✓
Gold, Y. B.	44	15	3,800		✓	
Gulick, R. L.	25	6	1,650			✓
Gray, Henry	49	11	2,050		✓	
Holmes, G. L.	32	8	2,200		✓	
Hills, Jacob	25	9	3,550	✓		
Martin, C. N.	67	22	4,500			✓
Myers, John	41	9	3,400		✓	
Phillips, J. J.	23	6	3,750	✓		
Potter, R. H.	31	10	3,500	✓		
Smith, W. T.	19	7	1,300			✓
Smith, R. J.	52	5	4,500			✓
Shaw, P. L. S.	35	6	3,600	✓		

TIME FINISHED ———

Directions for Scoring the Business Ability Test

Time.—Time in taking this test is not important in the hiring of men for executive positions or for positions of responsibility. By experiment, it was found that high grade business executives do not take any less time than office workers of low grades of ability.

Time on Section VII should be considered only in hiring employees for clerical positions, where speed of thinking is essential in their production.

Scoring.—Scoring is done by counting the number of questions correctly answered. The number of correct answers for each section is totaled and the total score is considered. Special emphasis may be given to certain sections, such as Sections VI and VII for clerical workers. Sections VI and VII may be omitted in testing men for positions where speed of thinking is not essential. By experiment it has been found that Sections VI and VII do not have value in hiring men for the service department, where mechanical ability is one of the main qualifications required.

Judgment.—Judgment should be exercised by the person in charge of administering the tests. Do not consider it an error if the applicant who takes the test fails to show the dollar mark in his answer or neglects to put the decimal point in a figure which indicates dollars and cents.

Norms.—Norms have been worked out for certain concerns, but it has been found best to establish norms for each individual concern. In some kinds of selling, it has been found that salesmen who make a score less than 60 do not have the intelligence nor the ability which is necessary for that kind of selling. In other concerns it has been found that men who fall below 80 do not make very good salesmen. This boundary line must be established by investigation for the particular concern which wishes to use the test in hiring. As a rule, men who make a score of less than 90 do not have the mental capacity or business training that will enable them to succeed in the highest executive positions.

TABLE LXXV

Grade of business ability	*Total number right for sections I, II, III, IV, and V*	*Number of errors for Section VI**	*Number of minutes for Section VII*
Very superior	90–100	21–26	0–4.9
Superior	80–89	18–20	5–7.9
High average	67–79	15–17	8–10.9
Average	53–66	13–14	11–12.9
Low average	40–52	11–12	13–14.9
Inferior	25–39	8–10	15–16.9
Very inferior	0–24	0–7	17 and over

* Section VI has 26 specific errors that should be corrected to make a perfect score. Copies of this *Business Ability Test* with correct answers may be obtained from the publisher by business firms who wish to use the test for employment purposes.

ANSWER TO FIVE-CIRCLE CHARACTER TEST (Figure 18)

If you have a plus score on any one trial, the probabilities are very great that you "peeped."

SOCIABILITY TEST (Part One)

Knowledge of the Lower Social Strata

Directions.—Each question has several possible answers. Underline the one answer that is correct or most nearly correct.

1. *Hitting the hay* is applied to . . . cows, retiring, the hay market, pugilism.
2. *To be framed* is . . . to have one's picture taken, to be conspired against, to be honored.
3. *To give someone the air* is applied to . . . radio, expelling some one, reviving a person.
4. *To be Ritzy* is to be . . . sporty, "putting on the dog," an athlete.
5. *To be in the cooler* is to be . . . an ice-man, in prison, a soda fountain clerk, a jeweler.
6. *Flying tackles* are used in . . . aviation, kite flying, football, baseball.
7. To play the *Future Books* is . . . doing research work, betting on a horse race, being a poor scholar, speculating in stocks.
8. A *buck* is . . . a dollar, a nudge, a push, a moose.
9. To *crash in on a party* is . . . to cause a riot, to go to a party without an invitation, to have a party, to ruin a party.
10. What kind of a crook is a *yegg?* . . . a safe cracker, a murderer, a forger, a burglar.
11. What is a *dick?* . . . a dog, a bird, a burglar, a detective.
12. What unit of the army is called *Leather Necks?* . . . marines, artillery, infantry.
13. *Spaniards* are called . . . frogs, spics, wops, dagos.
14. A *puck* is used in . . . golf, hockey, lacrosse, chess.
15. A *bridge* is used in . . . tennis, hockey, boxing, billiards.
16. To *fade* is a term used in . . . boxing, tennis, hockey, dice.
17. *Bull* is a term applied to . . . a horse, a mistake, a policeman, a dope fiend.
18. *Cokey* is a term applied . . . a crook, a stoker, a drug addict, an imbecile.
19. A *bookie* is . . . a thief, a bet taker, a dope fiend, a librarian.

20. *Box cars* is a term used in . . . racing, boxing, dice, rowing.
21. The *Three Dumb Dukes* are in . . . football, baseball, pugilism, jail.
22. How much does a *welterweight* weigh? . . . 175, 190, 165, 147.
23. *A player is farmed out* when he is . . . working on a farm, when he is hired by one team and sent to another, when he plays with another team.
24. A *Palooka* is . . . a man from Poland, a term applied to a cheap prize fighter, a name for a ball player, a forger.
25. *Mechanic's Delight* comes in a . . . green, red, yellow, blue package.
26. *Resin dust* is used in . . . pool, dice, pugilism, golf.
27. How many ropes around a ring for a professional prize fight? . . . One, two, three, four.
28. A *broad* is a . . . wide plank, woman, robber, female dog.
29. Which causes intoxication the quickest? . . . beer, gin, wine, cognac.
30. The *Olympic games* are held every . . . 2, 4, 6, 8 years.
31. The highest possible score in *bowling* is . . . 250, 300, 400, 642.
32. To *get hooked up* is . . . to be hung, to be married, to get a distant station over the radio.
33. To *bump off a person* is . . . to kill him, to give him a party, to trip him, to squeal on him.
34. A *smacker* is one who . . . pets, boxes, a dollar, a pugilist.
35. A *skirt* is a . . . "jane," vamp, chorus girl, dancer.
36. A *daisy cutter* is a . . . farm implement, milliner, low ball, rustic.
37. A *flying mare* is a . . . winged horse, recreation park term, wrestling hold.
38. A *night line* is a . . . policeman's beat, sheik's conversation, fishing device, burglar.
39. A *grand* is . . . a car, an American, an opera, a thousand dollars.
40. A *wren* is a . . . woman, food, sparrow, manicure.
41. The *Boston Tar Baby* was . . . an actor, a boxer, a colored child, a sailor.
42. A *divot* is a name given to a . . . crooked jockey, swimming event, piece of turf from a golf course, position on a polo team.
43. By the term *swag* is meant . . . walking stick, haughty air, a drink of liquor, loot.

44. *Palming* is a term used in . . . gambling, vice, ring-around-the-rosie, lecturing.
45. *To show* is a term used in . . . dice, racing, boxing, poker.
46. The password of the Billy Goat Society is . . . Horsefeathers, OKMNX, I hope you don't feel hurt.
47. Earl Sande is an . . . author, minister, jockey, politician.
48. *Snowbird* is . . . an animal, a dope-fiend, a bang artist, a horse.
49. *Half Nelson* is a term used in . . . swimming, dining, handball, wrestling.
50. *Quiff* is a . . . breakfast food, disease, woman, flower.
51. A *saw-buck* is . . . ten dollars, five dollars, one dollar.
52. A *pan-handler* is a . . . miner, dish-washer, beggar, peddler.
53. *Black Maria* is a . . . colored comedian, play, patrol wagon, painter.
54. *Mugging* is . . . making faces, photographing criminals, a nervous disorder, cribbing.
55. *Garboon* is slang for . . . cuspidor, saxophone, negro, cigarette.
56. *Drippy* means . . . collegiate, rainy, unpopular, brilliant.
57. A *biscuit* is a . . . sweetheart, food, joke magazine, fool.
58. *Ankle along* means . . . dance, move on, to date, trip.
59. *Blind tiger* means . . . an animal, a roadhouse, an advertisement, a speakeasy.
60. A *knock-down* is a term applied to . . . an introduction, a hut, a prize fight decision.
61. *Small casino* is . . . the five of hearts, ace of diamonds, two of spades, ten of diamonds.
62. The figures on the directly opposite sides of a "dice" add up to . . . 4, 6, 7, 10.
63. Unescorted women who speak to a strange man on the street are called . . . bims, kiddo, shoplifters, gold-diggers.
64. *Bindle-stiff* is a . . . flower, college professor, tramp, motorman.
65. What is the maximum amount of whisky that a physician may prescribe to each patient? . . . half a pint a week, a pint every ten days, a cup a day, a quart a month.
66. A *goo-goo* is a . . . Frenchman, Spaniard, Chinaman, Filipino.
67. *Lamp* is a slang expression for . . . extinguishing the light, turning on the light, to look at, electrocution.

68. *Flat-foot* is a slang term for a . . . Jew, burglar, hobo, policeman.

69. *Soup* refers to . . . nitroglycerine, jail, court trial, tramp steamer.

70. *Here is how* is a . . . book of poetry, essays, jokes, drinking recipes, sports.

71. Which is the name of a gambling game? . . . 3, 6, 7½, 4.

72. In crap, *Snake eyes* is . . . 2 and 3, 1 and 1, 3 and 1, 2 and 2.

73. In gambling, *light* refers to . . . dice, cards, money, clubs.

74. The weight of the championship boxing gloves is . . . two ounces, six ounces, four ounces, eight ounces, one pound.

75. A *chippy* refers to a . . . billiard ball, girl, the score of 3 in dice, lumber jack.

SOCIABILITY TEST (Part Two)

Knowledge of the Upper Social Strata.

Directions.—The following statements are either true or false. Put a circle around the T, if True, or the F, if False.

T. F. 1. A gentleman should sit to the left of the lady at dinner.
T. F. 2. When sitting down at the dining table with a young lady, the gentleman should wait for the waiter to push her chair up to the table.
T. F. 3. Brick ice cream should always be eaten with a spoon.
T. F. 4. When the waitress sets down your dishes, you should thank her.
T. F. 5. At the dining table, you should keep quiet and attend to your eating.
T. F. 6. At a formal wedding, the bride should march up to the altar on the arm of the bridegroom.
T. F. 7. It is well to tip the maids at a hotel after a visit of two days.
T. F. 8. Salads are always at the left of the plate.
T. F. 9. The man should not offer to shake hands when introduced to a lady.
T. F. 10. In a social group, always monopolize the conversation because it puts the others at ease.
T. F. 11. The man should always precede the girl when approaching seats in a theater, when no usher is present.
T. F. 12. If something disagreeable is found in the food at a dinner, the host's attention should be called to it.
T. F. 13. The bridegroom should wear a Tuxedo.

T. F. 14. Spats should not be worn with evening clothes.
T. F. 15. Sport clothes can be worn to informal evening parties.
T. F. 16. It is considered proper to wear a watch and chain across a Tuxedo vest.
T. F. 17. R.S.V.P. means that your presence is requested.
T. F. 18. Olives may be taken with the fingers.
T. F. 19. After finishing eating, the fork should be laid on the plate with the prongs upward.
T. F. 20. When served with soup, crackers may be broken into the cup.
T. F. 21. The gentleman sitting next to a strange lady in a theater should assist her when she wishes to take off her coat.
T. F. 22. In introducing a friend to another friend, the younger person is presented to the older person.
T. F. 23. Lettuce should not be cut with a knife.
T. F. 24. When the proprietor of a restaurant waits on you, it is proper to tip him.
T. F. 25. It is necessary to wait for the hostess to start eating.
T. F. 26. It is correct to pay a condolence call.
T. F. 27. Demi-tasse is a vegetable.
T. F. 28. Pie a-la-mode is very good without ice cream.
T. F. 29. The typewriter can be used to answer social letters.
T. F. 30. In serving a meal, all drinks should be served on the right.
T. F. 31. It is proper to shake hands across a dinner table upon an introduction.
T. F. 32. In buttering bread, the bread should be broken and held in the hand while being buttered.
T. F. 33. In correspondence, the term "My dear" is more formal than "Dear."
T. F. 34. When calling for a girl friend, it is permissible to sit in the car and blow the horn until she signals that she is coming.
T. F. 35. Acceptance to a formal party should be telephoned.
T. F. 36. Frankness is not necessarily a virtue.
T. F. 37. It is proper for a lady to take the arm of a man when walking on the street during the day.
T. F. 38. It is never permissible to cut an egg with your knife.
T. F. 39. A wedding at high noon is always formal.
T. F. 40. A distinguished guest should be seated at the right of the hostess.

T. F. 41. It is necessary to excuse yourself from a group upon leaving the room temporarily.
T. F. 42. A gentleman should never disagree with a lady even though she may be wrong.
T. F. 43. It is correct form to "excuse your glove" and shake hands without removing it.
T. F. 44. In sending out invitations to a wedding, the added inquiry of "R.S.V.P." is permissible.
T. F. 45. It is proper for a girl to applaud at a dance.
T. F. 46. A protestant on entering a Catholic church should try to follow the services.
T. F. 47. Bluepoint cocktail should be eaten with a spoon.
T. F. 48. The mouth should always be wiped before drinking water.
T. F. 49. Bowls in a wash room of a Pullman should be wiped out after use.
T. F. 50. Food should always be passed first to the ladies on each side of you when at a meal.
T. F. 51. At a formal dinner dance, each couple should wait for the hostess to dance before they dance.
T. F. 52. The shirt cuffs of a man should show when he is wearing a coat.
T. F. 53. One should congratulate a lady on her engagement.
T. F. 54. The card of a married woman is smaller than that of a man.
T. F. 55. When two women are introduced, they should shake hands.
T. F. 56. The customary hour for calls is 3:30 to 4:30.
T. F. 57. At an informal dinner the men must give the women their arms.
T. F. 58. The lady should precede a man when entering a restaurant.
T. F. 59. A man may wear a strap-watch with a tuxedo.
T. F. 60. A lady may wear a sorority pin on a formal dress.

KEY TO

Knowledge of the Lower Social Strata.

1. Retiring.
2. To be conspired against.
3. Expelling some one.
4. "Putting on the dog."
5. In prison.
6. Football.
7. Betting on a horse race.
8. A dollar.
9. To go to a party without an invitation.
10. A safe cracker.
11. A detective.
12. Marines.
13. Spies.
14. Hockey.
15. Billiards.
16. Dice.
17. A policeman.
18. A drug addict.
19. A bet taker.
20. Dice.
21. Pugilism.
22. 147.
23. When he is hired by one team and sent to another.
24. A term applied to a cheap prize fighter.
25. Yellow.
26. Pugilism.
27. Two.
28. A woman.
29. Cognac.
30. 4.
31. 300.
32. To be married.
33. To kill him.
34. A dollar.
35. A "jane."
36. A low ball.
37. A wrestling hold.
38. A fishing device.
39. A thousand dollars.
40. A woman.
41. Boxer.
42. A piece of turf from a golf course.
43. Loot.
44. Gambling.
45. Racing.
46. OKMNX.
47. Jockey.
48. Dope-fiend.
49. Wrestling.
50. Woman.
51. Ten dollars.
52. Beggar.
53. Patrol wagon.
54. Photographing criminals.
55. Cuspidor.
56. Unpopular.
57. Sweetheart.
58. Move on.
59. Speakeasy.
60. An introduction.
61. Two of spades.
62. 7.
63. Bims.
64. Tramp.
65. A pint every ten days.
66. Filipino.
67. To look at.
68. Policeman.
69. Nitroglycerine.
70. Drinking recipes.
71. 7½.
72. 1 and 1.
73. Money.
74. Four ounces.
75. Girl.

TABLE LXXVI

NORMS FOR KNOWLEDGE OF THE LOWER SOCIAL STRATA

Quintile in knowledge	*Number of questions answered correctly*
Uppermost fifth	67 to 75
Second fifth	63 to 66
Middle fifth	59 to 62
Fourth fifth	53 to 58
Lowermost fifth	0 to 52

KEY TO

Knowledge of the Upper Social Strata.

1. True.	31. False.
2. False.	32. False.
3. False.	33. True.
4. False.	34. False.
5. False.	35. False.
6. False.	36. True.
7. False.	37. False.
8. True.	38. True.
9. True.	39. True.
10. False.	40. True.
11. True.	41. True.
12. False.	42. False.
13. False.	43. False.
14. True.	44. False.
15. False.	45. False.
16. False.	46. False.
17. False.	47. False.
18. True.	48. True.
19. True.	49. True.
20. False.	50. False.
21. False.	51. True.
22. True.	52. False.
23. True.	53. False.
24. False.	54. False.
25. True.	55. False.
26. True.	56. True.
27. False.	57. False.
28. False.	58. True.
29. False.	59. False.
30. True.	60. False.

TABLE LXXVII

NORMS FOR KNOWLEDGE OF THE UPPER SOCIAL STRATA

Quintile in knowledge	*Number of questions answered correctly*
Uppermost fifth	54 to 60
Second fifth	50 to 53
Middle fifth	45 to 49
Fourth fifth	39 to 44
Lowermost fifth	0 to 38

INDEX

Index

A

Abreaction, 132
Absenteeism, 602, 615, 635
Abulic obsession, 93
Accidents, 210, 602, 603
Adaptation, 26, 140, 269
Adjustments, complaints, 475, 478
Adler, Alfred, 98, 292
Adrenals, 79, 83
Advertising:
  appeals, 498
  business cycles and, 452
  devices, 538, 562
  exaggerated, 531, 537
  guaranties and, 472
  incomes, 302
  institutional, 466
  Lucky Strike, 482
Aggressiveness, 217
Alcoholism, 112
Allen, C. B., 651
American Snuff Co., 43
Appeals in advertising: 69, 498
  abstractions in, 526
  list of, 504
  long-circuit, 509
  negative, 516
  rationalized, 509
  reason-why, 508
  rules for, 526
  sources of, 530
  variety of, 507
  versus form, 506
Application, letters of, 221
Approach, sales, 366
Armco, 586
Ashbrook, Britton, 368
Association linkages, 63, 134, 588
Astrology, 168
Athletics for employees, 599
Attention in advertising, 574
Autocoid substances, 78
Autosuggestion, 90
Averages, differences between, 688

B

Bagby, E., 138
Bartlett, John T., 184, 190
Bausch & Lomb Optical Co., 410
Beck, A. C., 320
Behavior, definition of, 7
Bernays, Edward L., 496
Bice, Hubert E., 490
Blonds, 157, 158
Blood pressure, 176
Bonaparte, Napoleon, 292
Bosworth, Clarence E., 421
Bradt, Ray A., 475
Brain, 62, 75, 154, 156
Brandenberg, G. C., 158
Brewer, John M., 292
Briggs, Thomas H., 343
Brill, A. A., 291
Brooker, Bertram R., 184
Brown, Donaldson, 452
Brown, Lyndon O., 303
Brunets, 157
Building, changes in, 31
Bulletin boards, 587
Burton, Marion Le Roy, 626
Burtt, Harold E., 211, 320

C

Cady, V. M., 215
California Ranching Co., 519
Carnegie, Andrew, 432, 596
Casamajar, Louis, 154
Catharsis, 134
Censor, 133, 148
Central tendency, 686
Character analysis: 152, 155, 162, 170, 173, 195, 701
  ratings, 237
  tests, 215, 711
Charts, 652
Checks, cashing, 188
Child training, 333, 405, 580
Cinderella tale, 562

Clark, Herbert B., 188
Cleeton, G. E., 158
Cliques, 337
Cobb, Arthur, Jr., 501
Coefficient, see Correlations
Coffee, virtues of, 533
Collecting accounts, 177, 182
College education, value of, 303, 307
Color preferences, 423, 566, 660
Compensatory mechanism, 86, 99, 293
Competitors, 409, 482
Complaints, 475
Complex, 62, 109, 134, 140, 372
Conflicts, mental, 138
Conklin, E. G., 25, 676
Conquering hero, 86, 101
Consumer analysis, 406
Contests:
  consumer, 484
  sales, 457
Contra-imitation, 436
Control groups, 658
Cöperative management, 604
Coöperative marketing, 36
Copy:
  effect of, 412
  human interest, 510
  humanizer, 560
  motion picture, 537
  plausibility, 524
  tests, 412, 668
  words in, 538
Corning Glass Company, 406, 544
Correlations, 678, 680, 682
Cortex:
  adrenal, 83
  brain, 62, 75, 156
Counter checks, 190
Coupons, in advertising:
  monthly returns, 419
  Postal regulations, 575
  rules for, 545
Credit:
  bureau, 174
  extending, 177
  instruments in, 175
  losses, 174, 183, 188
  obtaining, 184
Criticisms, 102, 342, 350
Crothers, Ralph, 449
Crushes, 127
Curves:
  multimodal, 657, 658
  normal frequency, 657, 658
  skewed, 657, 658
Cycles:
  advertising, 452
  business, 441
  financial prices, 443

D

Dashiell, John F., 79
Davis, Catherine Bement, 624
Davis, G. L., 182
Davis, James J., 538
Dealer, Ask Your, 575
Dearing, Harold W., 506
Debts, losses from, 184, 192
Demonstrations, sales, 373
Dempsey, Mary V., 637
Dennison Mfg. Co., 453
Depressions, business, 364
Deute, A. H., 381
Dick, Ralph H., 645
Difficulties, value of, 331
Direct mail:
  color in, 566
  devices, 562
  postage in, 563
Discharge of employee, 291, 351
Dodd, Lee Wilson, 140
Dreams, 132, 139
Du Bois, Marie, 423
Duffus, Robert L., 265
Dysmenorrhea, 88, 118

E

Economy, expressions of, 543
Education, changes in, 40
Eells, Walter C., 681
Electra complex, 109
Elliott, E. C., 418
Ellis, Robert S., 585
Empathy, 371
Empirical, 3, 19, 227, 646
Employment, changes in, 33
Endocrinology, 23, 77, 85
Engineering schools, 307
Evolution, organic, 24
Executive:
  humanness of, 337
  humor and, 346

Executive: (*Continued*)
  influence on morale, 353
  patterns, 50
  personality of, 356
  policies, 339
  working day, 322
Exhibitionism, 87, 126, 220
Extroversion, 56

F

Failures, business, 185, 650
Falk, A. T., 420
Fashions, 422
Fears, 14, 87, 91, 115, 138, 361
Finder, 46, 447
Food orders, 440
Forecasting:
  automobile sales, 434, 451
  dangers in, 436
  markets, 405
  population, 437
  presidential elections, 459
  services, 408, 661
  social changes, 430
Foreman, 582
Fowler, Nathaniel, 498
Francisco, Don, 440
Franken, R. B., 664
Frantz, S. I., 72
Free, 544
Free, E. E., 25
Frequency of error, 320
Frequency of use, 320
Freud, Sigmund, 116, 124, 130, 136
Fryer, Douglas, 682
Functional illness, 86

G

Garretson, C. D., 478
Gates, Arthur I., 289, 290
General Motors Corp., 450
Giles, Ray, 42
Gilkey, James Gordon, 322
Gillilan, Strickland, 32
Gilliland, A. R., 218
Glands, 78
Goldfarb, William, 183
Goldsmith, Dorothy, 203
Gompers, Samuel, 597
Gonads, 79, 84
Good will:
  competition and, 482
Good will: (*Continued*)
  contests and, 484
  finance companies and, 491
  increasing, 466
  measurement of, 463
  rumors and, 492
  special sales and, 488
Goode, Kenneth M., 175, 439
Gotham Silk Hosiery Co., 455
Grading examinations, 418
Graphology, 152, 167
Graphs, 375, 652
Gregory, William K., 25
Gridley, Don, 540
Grinstead, L. H., 480
Guaranties, 472
Guessing, correction for, 692

H

Habit, 61, 314
Habit-spasm, 87, 123
Haldeman-Julius, E., 540
Hamilton, G. V., 148
Handwriting analysis, 167
Haring, H. A., 189
Harn, O. C., 551
Headlines, 438, 504
Heinrich, H. W., 603
Hepner, Harry W., 289, 298, 347, 636, 665
Herrick, C. J., 72
Hill, George Washington, 482
Hiring, 193, 199, 600
Hollingworth, H. L., 193, 278, 288, 296, 509, 568, 677
Homosexuality, 110, 126
Hormones, 78
Hosiery colors, 423
Hotchkiss, G. B., 664
Humor, 346
Hurlock, E. B., 345
Hyde, William Easton, 515
Hypnoid state, 130, 144
Hypnosis, 130
Hypochondria, 88, 119
Hysteria, 86, 95

I

Ideas:
  fixed, 104
  sources of, 529

Identification, 87, 103
Illustration:
  attention and, 568
  coupons, 546
  trade name, 557
Inabilities, list of, 16
Incomes:
  business men, 303, 306
  corporations, 651
Index numbers, 653
Industrial democracy, 606
Information desk, 468
Infringement, trade names, 559
Inquiries, direct mail, 421
Institutional advertising, 466
Insurance:
  appeals in, 502
  employee, 598
  monthly sales, 441
Integrative action, 71, 74
Intelligence:
  college students, 290
  labor turnover and, 211
  occupation and, 207, 257, 288, 296, 306, 578
  quotient, 209, 289
Interview:
  credit, 170, 174
  employment, 193
  guide, 199
  multiple, 226
  psychoanalytical, 219
  research, 668
Intoxication, 101, 112
Introjection, 87, 114
Introversion, 56
Invalidism, 87, 96, 118, 121, 143

J

Jackson, Josephine A., 136
Janet, Pierre, 95
Job:
  analysis, 250
  assigning, 255
  classification, 253, 258
  grading, 253
  specification, 251
Johnson. O. R., 237, 238
Jones, Saunders, 456

K

Kenagy, H. G., 157, 207
Kent, G. H., 66
Kerwin, J. F., 568
Kimball, Dexter S., 601, 603
Kitson, Harry Dexter, 265
K. M. H., 42
Knight, F. B., 158, 248

L

Labor unions, 583, 599
Laird, Donald A., 57, 58, 157, 344, 692
Landis, Carney, 623
Lanier, Lyle H., 682
Larrabee, C. B., 532
Lashley, Carl Spencer, 72
Learning, 61
Leary, Daniel Bell, 166
Leeper, Clyde L., 635
Letters:
  application, 221
  folding of, 563
  recommendation, 222
Liberty, 696
Libido, 139
Lichtenberg, Bernard, 415
Lincoln, Abraham, 371
Localization, 72, 152
Loyalty, employee, 103, 106, 109, 255, 339, 607, 621
Lund, F. H., 524

M

McCuaig, C. B., 179
McQuade, Jerry, 559
McRoberts, Samuel, 659
Maddy, C. D., 565
Magazine, employee, 589, 599
Manias, 116
Market analysis, 406
Marriages, 442
Marston, W. M., 176
Masculinity, organ of, 83
Masochism, 87, 126
Masturbation, 125
Mean, 686
Median, 686
Memory, 315, 318, 348
Menstruation, 657
Merceles, T. F., 524
Mergers, 447
Metabolic index, 80

Mind, 48, 73, 137, 333
Mode, 686
Moore, H. T., 218
Morale of employees, 68, 353, 621
Motion picture, 375, 537
Munchweiler, B. J., 476
Myers, James, 606
Myxedema, 80

N

Name, product, 68, 550
National Industrial Conference Board, 33, 34, 42, 589, 601, 615, 616
Negative appeal, 516
Negativism, 87, 106, 395
Nerve current, 60
Neural pathway, 58, 61, 64, 68, 71, 74, 139, 270, 365
Neurasthenia, 86, 88
Neurogram, 61
Neurology, 23, 60
Neurone, 59
Neurosis, 86, 118
New, Harry S., 486
New American tempo, see Tempo, new American
Newbold, E. M., 602
New Yorker, 401

O

Objections, prospect's, 380, 385
Occupational:
  adaptation, 269
  analysis, 298
  changes, 33, 265
Œdipus complex, 87, 109, 110
Ogden, C. K., 98
Olds, Marshall, 667
Order-of-merit:
  method, 673
  scale, 675
Organic illness, 86
Otis, A. S., 280

P

Palmistry, 168
Parathyroids, 79, 82
Parental:
  influence on vocation, 295
  instinct, 628
Parents, way of, 32
Parsons, Floyd W., 43
Patterns:
  behavior 48, 55, 67
  neural, 58, 61, 64, 68, 71, 74, 139, 365
Paull, Irving S., 35
Paynter, Richard H., 560
Pearl, Raymond, 437
Pearson Product-Moment formula, 678
Percentile rank, 209
Personality, 74, 137
Philosophy of life, 333, 595
Phobia, 87, 91, 115, 138
Phoenix Mutual Life Ins. Co., 203
Phrenology, 152
Physical examinations, 599
Picnic, company, 588, 599, 601
Picturization, 38, 557
Pineal body, 79, 82
Pittsford, Ben C., 475
Pituitary, 79, 82
Poffenberger, A. T., 673, 677, 694
Politics, company, 337, 356
Popenoe, Paul, 625
Population changes, 35, 437
Powell, Harford, Jr., 175
Praising employees, 294, 342
Predicting:
  copy, 412
  coupon returns, 419
  cycles of business, 441
  dangers in, 436
  fashions, 422
  food orders, 440
  insurance sales, 441
  letters, 421
  marriages, 442
  population, 437
  sales, 455
  social changes, 430
  straw votes, 459
Prescott, Ray B., 434
Prince, Morton, 62
Probability table, 682
Probable error, 160, 681
Product analysis, 406
Professional schools, 471
Profit sharing, 610
Projection, 87, 112
Promotion:
  gaining, 325
  giving, 229, 255, 258

Pronunciation of trade names, 555
Propaganda:
  employer's, 585, 587
  labor's, 583
  public relations, 495
Prospects:
  classes or types, 391, 410
  problems of, 364, 522
Psychasthenia, 86, 91
Psychiatry, 23
Psychic waves, 171, 176
Psychoanalysis, 23, 130, 136, 141, 219, 291
Psychology, definition of, 5, 6
Psychoneuroses, 86
Psychoses, 86
Pyke, Don, 563

Q

Questionnaire:
  class reached, 664
  interviewer's, 668
  mailed, 661
  newspaper features, 665
  phrasing of, 666, 670
  physical appearance, 662
Quotient, intelligence, 209, 289

R

Ramaker, Benjamin J., 410
Ratings:
  employee, 231
  kinds of, 233
  number of, 674
  principles of, 244
  salesmen, 193
  values of, 237
Reciprocal numbers, 420, 439
Recognition of advertisements, 693
Recreation, 580, 599
Reed, Charles M., 184
Reëducation, 144
Regression, 87, 107
Religious changes, 31, 594
Reports, research, 328, 409, 649
Representation plans, 604
Reprimands, 102, 342, 350
Research:
  commercial, 432, 645
  organizations for, 408, 646
  reports, 649
  when starting, 647
Returned goods, 479
Reuterdahl, Arvid, 25
Reversed indorsement, 530, 536
Richmond, H. A., 202
Robinson, D. E., 669
Rosanoff, A. J., 66
Rothafel, S. L., 46
Rothschild, James H., 566
Rumors, 492

S

Sadism, 87
Sales analysis, 406
Sales management, 193, 358, 457, 472, 652
Salesmanship:
  cards in, 368
  closing the sale, 387
  demonstrations in, 373
  failure to get order, 399
  formulas for, 362, 396
  meeting objections, 380, 393
  minor decision in, 388
  social value of, 359
  talk to prospect, 373, 377
Salesmen:
  expense accounts of, 401
  future of, 433
  getting rid of, 324
  researchers, 669
  stimulating, 457, 466
Sales, special, 488
Salisbury, G. R., 410
Salisbury, Helen M., 136
Scientific method, 4, 19, 165, 595, 645, 659
Scott, Walter Dill, 194, 664
Seal of approval, 474
Seashore, Carl E., 32, 287
Seasonal variations, 442, 457
Secretarial complex, 109
Secular trend, 442
Self-analysis, 278
Selling, see Salesmanship
Servants, domestic, 30
Service bureaus, 474
Sex differences, 14, 83, 126, 154, 490, 623, 627, 630, 635, 660
Shen, E., 250
Shibley, Fred W., 432
Shoes, size of, 29
Shop council, 604

Simons, Eric N., 546
Skinner, C. E., 36
Slang, 334
Slater, A. L., 487
Slichter, Sumner H., 33
Slogans, 547
Smoking, 120, 670
Spearman Rank-Difference formula, 678
Stage fright, 93
Standard deviation, 689
Starbuck, John, 427
Starch, D., 418
Stevenson, John A., 320
Stock ownership, 37, 470, 614
Stock purchase plans, 614
Stote, Amos, 47
Strikes, 591
Strong, Edward K., Jr., 284, 362, 363, 555
Struggle for existence, 26
Stunt in selling, 376
Style, 422, 424, 430
Sublimation, 110, 135
Suffering hero, 87, 102
Suggestion plans, 617, 622
Suhr, Fred, 430
Sumner, G. Lynn, 39, 424, 427, 429
Sumner, Keene, 154
Super-advertising, 531
Sutherland, J. W., 676
Synapses, 59

T

Technician, business, 18
Tempo, new American, 28, 38, 45, 108, 579, 591, 652
Tendencies:
  difficult, 15
  reaction, 504
Tests:
  army, 210, 288
  business ability, 213, 701
  character, 215, 711
  psychological, 681, 701, 710
  scoring, 709
  sociability, 711
  values of, 210
  vocational, 286
Thomson, J. Arthur, 25
Thorndike, Edward L., 626
Thymus, 79, 82
Thyroid, 79, 80
Tic, 123
Tilles, Roy E., 455
Timeliness, 529
Titles of books, 540
Toilet articles, number of, 552
Toys, 405
Trade-mark character, 560
Trade names, 550
  confusion of, 559
  pronunciation of, 555
  registration rules, 559
Trading areas, 411
Training employees, 258, 329, 352, 358, 471, 591, 600, 659
Transference, 134
Treasury Department, 650
Tregoe, J. H., 171
Twain, Mark, 377

U

Unconscious, 138, 220, 249, 293
Updegraff, Robert R., 38, 44, 498

V

Vacations, 598, 602
Van Heusen collars, 494
Variation, 26, 44
Vending machines, 188
Vocation:
  case study, 297
  changes in, 265
  choosing, 264
  parental advice in, 272
  problems for, 276
  psychoanalysis and, 291
  specialization in, 300

W

Wallace, A. R., 26
Walters, J. E., 158
Wants, 364
Warburton, J. H., 181
Webster, Daniel, 154
Welfare work, 597, 601
Whenpecking, 94
Whispered campaigns, 492
White Co., 456
White, Percival, 567
White, William A., 134

Whitehorne, H. C., 352
Whitmore, Eugene, 421
Will, 313
Williams, B. J., 366
Williams, Russell B., 564
Wissler, C., 660
Wolf, W. Beran, 141
Women:
  absenteeism of, 635
  color preferences, 660
  conversations of, 623
  illnesses of, 635
  occupational changes, 630
  physiological differences, 624
Women: (*Continued*)
  psychological problems, 14, 629
  scholarship, 626
  sexual life, 624
  supervising of, 623, 630, 638
  taxicab drivers, 637
Woodbridge, W. S., 507
Word-picture, 512
Words, 538
Worry, 14, 92, 122

Y

Yoakum, C. S., 207

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